Tuning

Russia

Towards Comparability of Higher Education Programmes

Information Review

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Artur Demchuk, Ivan Dyukarev, Evgeniya Karavaeva,
Pablo Beneitone, Julia González and Robert Wagenaar
(Editors)

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Towards Comparability of Higher Education Programmes. Information Review
This information review presents the key general results and findings produced by the Tuning Russia project in the period of 2010-2013.

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Preface

The Tuning Russia project is a result of the effort and dedication of many people with a commitment to higher education. From the outset it has been clear that the Tuning Russia project is both a project and an experience. It is a project that has brought together leading representatives of higher education institutions in Russia and Europe to discuss the most significant aspects of university systems with the ultimate aim of bringing about improvements through the sharing of good practices.

Because of this way of seeking consensus, the Tuning project has also been a positive and intense experience of dialogue, both among the Russian Universities and Subject Area Groups, which have developed a greater capacity for mutual understanding through taking into account each participant's point of view, and between European and Russian colleagues, with the establishment of flexible channels of communication that allow a greater understanding of the different contexts.

We would first like to thank the European Commission[1], which through its Education, Audiovisual and Culture Executive Agency (EACEA)[2] and Tempus Programme[3] has offered us the support that has made this project possible.

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[1] The European Commission, http://www.ec.europa.eu/

[2] The Education, Audiovisual and Culture Executive Agency, http://www.eacea.ec.europa.eu/index_en.php

[3] The Tempus Programme, http://www.eacea.ec.europa.eu/tempus/index_en.php

We also want to thank all the participating institutions of higher education, who through their academic and administrative staff have offered us their time, energy and support to help meet our goals. The Tuning Russia[4] project became a reality due to collective work of 9 subject area groups and we would like to thank them all and particularly the coordinators of the 11 working areas, who have guided each group, steered it and ensured that it achieved the results set out from the beginning. We stress our deep appreciation to all European and Russian experts who have made a significant contribution in various subject areas.

We would also like to highlight the important role played by the Association of the Classical Universities of Russia[5], its Executive Director Evgeniya Karavaeva, who successfully accompanied the debate in the universities and subject area groups, with a deep respect for diversity of opinion and a strong commitment to the task assigned. The Secretary General Igor Kotlobovskiy personally has managed to ensure that the project was known beyond the participating universities, and have taken from Association's members proposals that have helped enrich the debate.

We express our sincere gratitude to Olga Oleynikova, Director of the National Tempus Office[6] in the Russian Federation who supported the Tuning process in Russia from the very beginning of the project and whose commitment and recommendations were invaluably important during the implementation of the project.

This project means dreaming - imagining ways in which current practices can be transformed and improved. But it means not only dreaming of this future, but of getting down to the work of making it a reality. In doing this, we have enjoyed the help of the Russian and European partners that organised the project meetings, the Association of the Classical Universities of Russia - ACUR (Russia), Lomonosov Moscow State University - MSU (Russia), Don State Technical University - DSTU (Russia), the University of Deusto - UD (Spain), the University of Groningen - RUG (Netherlands), the University of Padova - UNIPD (Italy), and Trinity College Dublin - TCD (Ireland). These institutions, through their staff, Artur Demchuk (ACUR), Vladimir Echenike, Irina Teleshova and Maria Ulyanova (MSU), Svetlana

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[4] The Tuning Russia, http://www.tuningrussia.org/

[5] The Association of the Classical Universities of Russia, http://www.acur.msu.ru/

[6] The National Tempus Office in the Russian Federation, http://www.tempus-russia.ru/

Shvedova (DSTU), María Ortiz Coronado and Sara Goitia Ubierna (UD), Ingrid van der Meer (RUG), Sara Pittarello and Luigi Filippo DONA' dalle ROSE (UNIPD), and Patrick Mc Cabe (TCD), have worked intensely for the success of these meetings.

We would also like to highlight the important contribution made at each meeting by the secretaries, by the people who spoke about their experiences at the plenary sessions, the academics who produced discussion documents, and those who revised them. Our special thanks go to Maida Marty Maleta, Jon Paul Laka and José Luis Narvaiza, the experts in statistics from the University of Deusto who prepared and analysed the data, and presented the results.

The project in general and this publication in particular would not have been possible without the coordination and recommendations of Pablo Beneitone, Director of the International Tuning Academy, who kindly offered us his time and experience in revising this book.

Finally, we would like to acknowledge the work of Ivan Dyukarev, Tuning Russia Project Manager, whose energy has kept things moving and get it done on time and on budget, enthusiasm has kept teams motivated and on track, and dedication has ensured that the project get the best result possible.

This information review presents the key general results and findings produced by the Tuning Russia project. Moreover, specific Reference Points have been produced for each of the subject areas covered by the Tuning Russia project. Each of these Reference Points contains a general description of one subject area based on the consensus reached during the Tuning process and can be found on the project Website[7].

We hope and believe that the material contained in this review will be very useful for all higher education institutions wanting to implement the Bologna Process, and that it will help them to find and use the most suitable tools for adapting or creating higher education programmes to respond to the needs of today's society.

Julia González and Robert Wagenaar
Tuning General Co-Coordinators

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[7] The Tuning Russia, http://www.tuningrussia.org/

Chapter 1

Background of the Tuning Russia project

Evgeniya KARAVAEVA and *Elena KOVTUN*

The methodology for design and implementation of educational programmes developed within the framework of the Tuning Project is gradually becoming the leading approach within the common European education space that is consistent with the Bologna Process principles. The major attractions of this methodology are the clarity of its basic principles (development of a suitable "meta-language" of international education), the clear and logical description of educational processes and its ability to account for and reconcile the educational models of different countries through advocating a common approach to defining aims, techniques and outcomes.

The core principles of the Tuning methodology and its most evident contribution towards enhancing education consist in bringing together competence-based education and transparent educational outcomes (making these comprehensible for all the stakeholders). Thus, higher education institutions are expected to formulate their educational goals in a succinct and precise way; employers are invited to select recent graduates as potential employees in a conscious and objective manner and to plan better their future professional development; while the students themselves are encouraged to become pro-active in terms of determining their educational needs and preparing for their desired employment.

The quintessence of this approach resides in the so called Profiles (specifications) of educational programmes. A perfect implementation

of the Tuning philosophy, these contain an exhaustive description of educational aims and outcomes, which, in turn, locate each educational programme within the context of other programmes both within a country and internationally. The Profiles explain what each graduate will learn and how and at what level these elements will be taught (according to the international educational programmes' indexes, and to the national and international qualification frameworks). There is no doubt that such Profiles will be introduced in some manner by all the members of the Bologna Process. Yet, it is equally clear that each participant country needs to develop Profiles compatible with the existing national educational system and that in order to implement this practice certain country-specific obstacles will need to be overcome.

Russian higher education degrees have traditionally provided a broad foundational (fundamental) rather than narrow practice-oriented professional training.

After the Soviet Union collapsed the Russian Federation introduced state educational standards (SESs) aimed at unification of the content of educational programs at all of the higher education institutions (HEIs).

The first "generation" of the SESs was introduced in late 1990s and does not practically allow HEIs any freedom in designing educational programs. The second "generation" of the SESs introduced in 2000 allowed HEIs to suggest up to 20% of the educational program content. SESs-1 and SESs-2 set "minimal" requirements for the content of educational programs and determined a fixed list of mandatory disciplines (subjects) along with the number of teaching hours allocated for those disciplines.

Russia joined the Bologna Process in 2003 and a number of measures have been taken since then in order to ensure terminological, normative and content-related compatibility of the Russian educational model with European practice. The classification of areas and programmes of studies has been revised, new-generation educational standards have been developed, professional standards are being developed, a system of public accreditation of educational programmes and a complex system of educational quality assessment are being implemented.

The core principles of programme design and implementation reflected in the new normative and methodological documents have been informed by, among others, the Tuning approach. Thus, Federal State Educational Standards (FSES), incorporating the employers' opinions and approved

in 2010-2011, speak of the competence approach, learning-outcome orientation as well as of calculating students' workload in credit units, and also mention the possibility of introducing a modular principle of curriculum design. New standards do not set rigid requirements for the content of educational programs, therefore, providing HEIs with more freedom in designing educational programs.

During the last 2-3 years, Russian higher education institutions (HEIs) have (re)designed and implemented educational programmes following FSES guidelines.

These new programmes are commonly referred to as core educational programmes (CEPs). In 2011-2013, the Association of the Classical Universities of Russia (ACUR), commissioned by the Ministry of Education and Science of the Russian Federation, has started monitoring the effectiveness of FSES implementation into the system of Russian higher education This *Monitoring* project continued in 2013 and was focused on analysing CEPs, among other things. ACUR experts evaluated how well CEPs met the requirements not only of FSES but also of the basic principles of the Bologna Process, including the major points of the Tuning methodology.[1]

The questionnaires administered within the *Monitoring* project to different categories of HEIs' employees have revealed a certain level of familiarity with the Tuning methodology. E.g., for the question "What was the priority method of determining additional competences to be developed by the CEP graduate?" 12.5% of respondents said that relevant Tuning subject-area-specific recommendations were taken into account. At the same time, 38.8% responded positively when asked whether *Tuning Educational Structures in Europe* international project methodology had been used by their HEI for designing CEPs.

This relatively high level of familiarity is not surprising. Some Russian HEIs first used the Tuning methodology back in 2006-2007. The Higher School of Economics, the People's Friendship University of Russia and Tomsk State University were the pioneers. Within the framework of *Tuning Educational Programmes in Russian HEIs* TEMPUS project, these HEIs used the Tuning

[1] More details on monitoring project and on its interim results see in: http://www.acur.msu.ru/monitoring.php and in *The experience of implementing federal state educational standards by professional education institutions of the Volga federal district* (Saratov, 29-30 October 2012). Saratov: Saratov University Publishing House, 2012.

methodology to design Bachelor and Master Programmes in European Studies and Applied Mathematics. In 2007-2008, another Tempus project —A Russian Tuning-ECTS based-model for the Implementation of the Bologna Process in Human Sciences (RHUSTE)— was carried out. As an outcome, educational programmes in History and Culture Studies were developed for different levels. Finally, since 2010 a number of Russian HEIs have been working together in a new Tempus project: *Tuning Russia*. The project's aims and objectives are further discussed below.

However, it must be admitted that the assumed familiarity with Tuning methodology was disproved by the analysis of the CEPs' documentation by monitoring ACUR subject area experts. These experts had to conclude that while the competence and credit-based approach to CEP design was observed formally (thus, complying with FSES requirements), HEIs usually had a poor understanding of what this approach entailed and often did not observe the sequence and logic of the Tuning step-by-step model for designing educational programmes.

The Tuning model comprises the following steps:

- Confirm the existing social need for the programme and define the programme profile.
- Describe programme objectives and identify the key competences (generic and subject-specific) it should develop.
- Identify and formulate measurable learning outcomes that should demonstrate that the graduate has developed the competences.
- Design and describe the programme contents and structure (modules and credits).
- Check the correspondence among the programme structure, the learning outcomes and the key competences.
- Select approaches to teaching and learning as well as methods of assessment in line with the competences to be developed.
- Develop an evaluation and quality assessment system.

The monitoring experts checked whether the educational programme documentation of the Russian HEIs reflected the following:

- CEP mission statement - a general description of professional and personal qualities of a graduate, information on the areas of professional

activity and on the economy sectors where the demand for such specialists is expected.
- Competences to be developed by the CEP graduate (primarily those in addition to the core competences already listed in FSES).
- Methodological support through teaching and learning techniques and a system of quality assurance to make sure students complete the CEP successfully (including materials and recommendations for continuous and interim evaluation).
- Requirements for the final state examination.
- Evidence of HEI's cooperation with employers in developing the CEP.

Special attention was paid to the mission statement because the task of comprehending and formulating the mission statement is key to the whole process of programme design. The aim is to define the graduate's profile in accordance with the academic specialisation of the university and with the labour market requirements. This statement determines the competences to be developed and, therefore, the disciplines and internships that should build up the programme. ACUR experts assessed whether the future areas of the graduates' professional activity were formulated correctly and with due detail; whether the graduate's profile was specified; and whether the mission statement matched the labour market demands.

The majority of the monitoring experts had to conclude that CEPs analysed do no more than mechanically reproduce fragments of relevant sections of FSES and/or of Sample CEPs (SCEPs) designed by FSES authors. The experts observed: "None of CEPs examined pointed out how the graduate's qualifications match the regional/country-level labour market demands"; "Aims are normally formulated at a very abstract level and literally reproduce SCEPs' aims"; "Programme designers tried to follow FSES guidelines as much as possible and demonstrate their own initiative as little as possible"; "Missions in the majority of HEIs are formulated in an abstract way, without taking into account regional labour market characteristics and profile"; "CEP aim is formulated in very general terms"; "In the majority of CEPs the aim (mission) is formulated in an abstract manner and has no practical value, for example 'The aim (mission) of the present BA CEP is to equip students —future Bachelors— ... with common cultural, professional and subject-specific competences in accordance with the FSES requirements and SCEPs' recommendations' or 'BA CEP aims at developing students' personal qualities as well as common cultural (universal) and professional competences in accordance with FSES requirements'".

The experts stated that such a formalistic approach to specifying educational aims leads to the absence of a coherent graduate's profile, resulting in both students and employers being unable to identify the specific features of a particular educational programme and to compare CEPs of various HEIs within one country, not to mention international programme comparison.

A similar formal approach was identified by the experts when analysing the competences graduates were expected to develop. In the majority of cases, programme designers simply copied the competence lists contained in FSES or SCEPs. Additional competences are very rarely added and do not contribute to the programme's specificity. There was also hardly any evidence that relevant employers were consulted in order to identify these additional competences. As a result, there was no clear link between the list of competences and the expected learning outcomes. Finally, this resulted in a lack of recommendations about ways to achieve the desired learning outcomes (in terms of disciplines, internships, continuous and interim evaluation, or even in terms of final evaluation procedures).

Therefore, it is clear that when designing CEPs Russian HEIs pay insufficient attention to the first three steps of the Tuning model:

- Confirm the existing social need for the programme and define the programme profile.
- Describe programme objectives and identify the key competences (generic and subject-specific) it should develop.
- Identify and formulate measurable learning outcomes that should demonstrate that the graduate has developed the competences.

This inevitably detracted from the logic of CEP design, led to the absence of clearly stated aims and objectives of a CEP and to the question of labour market demands for the graduates of a specific profile being ignored. The curricula, then, did not match the competences listed, while the competences (despite occasional excessive level of detail) often did not sum up to a coherent and labour-market-tailored profile.

One could attribute these drawbacks to the fact that Russia is just making the first steps towards bringing its national educational space in line with

the European one. Nonetheless, disregarding such problems might nullify the positive effect expected of the current Russian higher education reform initiatives. Indeed, if HEIs consider the current reform to be no more than another bureaucratic top-down campaign, the Russian higher education programmes can hardly aspire to ever become compatible and comparable with those of Europe.

On the other hand, not all the fault lies with Russian HEIs. Russian statutory documents regulating competence-building approach, credit system, unit format of educational programs are often vague or imprecise.

Unfortunately, the new Federal Law *On education in Russian Federation,* which applied from 1 September 2013, does not change things dramatically. The improved definition speaks of an educational programme as "a complex of core educational elements (volume, contents, expected outcomes) and administrative and pedagogic provisions… that is to be represented by a curriculum, an academic calendar, subject programmes, and other components, as well as assessment and methodology materials".[2] Again, the need to formulate programme aims and specialisation is not mentioned directly. Only the expected outcomes are mentioned. However, if the general aim has not been considered previously, the programme will hardly reach its aim.

The *Monitoring* project has also identified a number of problems in the area of programme design and implementation related to drawbacks in the FSES. On the one hand, these Standards have incorporated the core categories of EHEA and Tuning (competences, learning outcomes, credits) and key methodological principles. On the other, the Standards themselves have created serious problems for the implementation of these categories by setting programme structure and outcomes requirements that were incompatible with full implementation of these methodological principles.

The new law introduced a concept of "credit" without direct relation to learning outcomes that does not correspond with the notion of ECTS "academic credit". The new law and other higher education regulatory documents do not contain the definition of a "module".

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[2] Federal Law of 29 December 2012 N 273-ФЗ "On educational in the Russian Federation".

The major FSES drawbacks in this respect are as follows:

- The lists of generic competences proposed are not consistent among different Standards, both in terms of their number and in terms of approaches proposed even for neighbouring areas (degrees).
- The lists of subject-specific competences are excessively long in the majority of Standards and are poorly structured along the possible professional activity profiles of the graduates (and in many Standards they are not grouped in any manner at all); the core subject-specific competences of every degree, obligatory for all graduates, are not set apart, which means that CEPs are obliged to cater for all the subject-specific competences listed in the respective Standard (that are numbering from 30 to 80 for a Bachelor programme).
- The cycle (horizontal) CEP structure and cycle workloads expressed in terms of credits, as envisaged by FSES (Section 6), do not allow HEIs to design modular (vertical) elements of educational programmes and to implement the programme in the modular format associated with European Credit Transfer and Accumulation System (ECTS User's Guide (2009)[3]).
- The learning outcomes related to particular elements of educational programmes (cycles, sections) formulated in FSES (Section 6, *CEP Structure* table) bear little relation to the lists of competences formulated in the same FSES (Section 5).

A solution which might be applied while waiting for the next version of the Standards (which is being currently developed by the Ministry of Education and Science of the Russian Federation) could consist of Russian HEIs incorporating the Tuning profile development methodology into their actions of designing educational programmes. As the *Tuning Guide to Formulating Degree Programmes Profiles* states, "The Degree Profile is a very brief document, of around two pages, designed to convey the essential information about a specific degree programme. It locates the programme in the academic map of disciplines or thematic studies. The Profile specifies the subject area or areas studied, identifies the level (first, second or third cycle) and indicates the special features that distinguish it from other similar programmes. The Degree Profile describes, in terms

[3] European Commission, ECTS Users' Guide, http://ec.europa.eu/education/pub/pdf/higher/ectsguide_en.pdf

of competences and learning outcomes, what graduates will know, understand and be able to do by the time they have successfully completed the programme. The Profile spells out what can be expected of the graduates in terms of the kinds of tasks they are equipped to undertake, their level of expertise and the responsibilities they can assume".[4]

The elements that form the profile template are as follows:

- Purpose.
- Characteristics
- Employability & further education
- Education style
- Programme competences
- List of Programme Learning Outcomes[5].

These elements should help educational programme designers to build a coherent whole, to make it clear to the students, instructors and potential employers how this particular degree of this particular HEI is different from other degrees within the same area of specialisation. Besides, the profile may explain how the degree in question is related to the existing national and international qualification frameworks; describe future areas of employment for the graduates; state if the degree in question is a research-oriented or an applied one, etc.

Depending on the aims and the nature of the degree, the profile enumerates the competences to be developed by the graduates, which in turn determine the desired learning outcomes. This leads to the maximum transparency of the educational process: one can clearly see why the things are done the way they are done.

The question as to which elements should build up the profile and how many elements are necessary is still being debated. There are those who believe that there should be more elements and that the profile should

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[4] Jenneke Lokhoff, Bas Wegewijs, Katja Durkin, Robert Wagenaar, Julia González, Ann Katherine Isaacs, Luigi F. Donà dalle Rose and Mary Gobbi, eds. *A Tuning Guide to Formulating Degree Programme Profiles.* Bilbao, Groningen and The Hague: Bilbao: Deusto University Press, 2010, p. 15.

[5] Ibid., 20.

include, for example, a description of the degree structure, teaching and learning techniques, etc. In this case, the notion of the *profile* becomes every similar to that of the Russian concept of the *core educational programme*.

Neither approach affects the argument we have been making. In any case, this is a document (or a set of documents) developed by HEI representatives (both academic and administrative staff) and approved by relevant state bodies (by way of state accreditation) or by the society (by way of professional or public accreditation). The degree profile comes as a response to a certain demand considered relevant by society. Regardless of its size, the profile —and its Russian counterpart, CEP— should reflect an internally-coherent educational programme and explain clearly what a person who completes this programme successfully will be able to do, in what sectors he/she will be able to work and what professional activities he/she will be able to perform.

In spite of the fact that each educational programme is unique and reflects the points of view and decisions of the team who develop it, it should account for the key features of the relevant subject area. This is why the Tuning project has elaborated the mechanism for determining core competences, whose use could be recommended to the Russian degree designers (see below).

As predicted by the experts, Russian higher education reform has run into considerable psychological resistance within higher educational institutions against the new "meta-language" of education (competences-modules-credits) and the innovative technologies of educational program development. The major difficulty here is that Russian HEIs have no experience of formulating programme's aims or mission (earlier, especially in the area of classical university education, curricula were based on traditional approaches and only rarely updated to account for advances in the relevant disciplines) or formulating measurable learning outcomes. Another major obstacle is that fact that Russian higher education degrees have traditionally provided a broad foundation rather than narrow practice-oriented professional training. What is clear is that, firstly, Russian HEIs will need considerable time if they are to truly convert to the new system, and, secondly, that forcing HEIs to apply the new format without facilitating a change in mentality can only lead to a "mechanical" —counterproductive— application of the new language.

Chapter 2

Introduction to Tuning

Julia GONZÁLEZ

Tuning Russia project which has been launched in October 2010 is finalized now with important results. This book will spell out the results, but it is worth giving a perspective of the Russian context on the one hand and of the Tuning Russia project on the other. The Russian context was presented in Chapter 1. The meaning of "Tuning" and the ways it was implemented by the Russian representatives will be explained in this chapter.

Three definitions encompass most of the reality of Tuning: (1) Tuning is a project for the universities and by the universities. (2) Tuning is a community of learning communities of academics, (3) Tuning is a methodology for designing and delivering degrees.

2.1. The Tuning Project

Tuning is a project and as such has a background and a context, was born out of certain needs, and can identify its aims and objectives, its actors, its development and its results. Its initial context emerged in 1999 in Europe when students had started to move in large numbers within the region. These movements created a sense of newness, of sharing something extremely important for a university—the students. The need for the full recognition of students' spending significant periods abroad could not be postponed. But simultaneously, the need to move freely once a first degree had been completed was also becoming urgent. It further meant that many of the students who had been abroad through

the Erasmus programme wanted to pursue their second degree in another country. Once the richness of the experience was confirmed and once the capacity for carrying it through was tested, there was no going back in the process of internationalisation for university students. The number who decided to take their second degree in a new country or countries increased significantly.

But a parallel **need** for employment came from the perspective of the students, their families and, in this case, the European labour force. Accompanying the development of mobility of goods was Europe's need for real capacity for mobility in the sphere of employment, coupled with a need to develop the identity of the region. At the political level, Europe was being built. A critical element in that factor was the necessity for a multicultural workforce and serious efforts to develop in university students a sense of belonging, something that mobility in the region help to develop.

The mobility of students brought with it a sense of closeness between academics, the development of common projects and the fascination of joint ventures. Europe was to be understood as a region built on diversity and centres of excellence that, radiating from the central level, should be built on shared intercultural perspectives. The region's history confirmed the strength of this approach; and in the field of education, countries joining together could count on greater strengths at the level of ideas and of human resources. Such an approach was important at a time when the concept of centres of excellence and the internationalisation recognized quality, both among universities and also among firms, since the ability to function competently at the international level became ever-more vital criteria of quality.

A third widely recognised **need** was that of academic bodies to join forces and stand poised between the needs of individual students and the international needs of business institutions. It was their opportunity to participate, to cooperate, to be active in the field and, above all, to use the moment to create higher levels of quality in university programmes. The role that higher education thus played immediately became an important driver permeating the commitment and focus of academics who participated in the Tuning Russia project. The actors were, therefore, clear. They were: (1) the academic staff who were responsible for creating degrees and degree programmes, and (2) those who were managers of tuning projects. This was their task and their contribution, and they felt the responsibility of taking part and responding, making themselves available

for the task and generously investing their time, their ideas, and their energy.

Their success, in large part, depended on the clarity of **the aims and the objectives.** They were tasked with the development of degrees, internationally compatible and comparable, built using a common language and, therefore, readable across the whole region. Transparency so the mutuality of this goal could be easily recognized was a high priority. However, this aim was enriched by two more: (1) The first was the issue of relevance at the degree level, the need to have an education that was close to the needs of society ranging from the local to the international level depending on the degree's aims. This goal required relevance to social needs, present and future, which in turn required building degrees in consultation with stakeholders. (2) The first aim was buttressed by the second: to use the opportunity to increase quality at the degree level. Both the search for quality at that moment and the energy created by academics coming together with a common goal resulted in enhancing quality at the programme/degree level as one of the more powerful driving forces of the project.

The result became very visible. It was the development of an intercultural system for developing outcome-based, student-centred and competence-based learning. It was a bottom-up system built at the subject level, founded on mutual trust and confidence, and manifesting deep respect for the autonomy of participants at the institutional, country and regional level. This system, from its earliest articulation has been based on listening, sharing and learning, is organized according to regional needs and choices, and is evaluated against objectives for which it can be held accountable at every step.

Although Tuning was developed to meet the concrete needs of a region and was never intended to be broader in scopes, many regions saw value in adopting it and adapt it to their contexts and needs. Its nature as a project requires that the actors be those of the region, the needs and background on which to base it adapted to the context and, if Tuning is authentic to its purpose and its mission, the aims and objectives will be those of the region itself. It has developed further into a powerful instrument of understanding and cooperation between regions across the world, a way of reaching global consensus but beginning from the institution, the country and the region. In this context, the different regions of the world feel drawn to become part of the project launching parallel processes of searching for recognition, identifying relevance and building

quality in higher education, starting from the needs and choices of their students, academic staff, employers, social organizations and diverse relevant groups. As these constituencies become involved and active in the process of thinking about the requirements of the graduate, a further need comes into focus, the need to develop the region socially and economically and to foster a more fair and forward-looking society with the highest levels of civic involvement and social responsibility.

2.2. Tuning is a Network of Communities of Learners

A useful way of understanding Tuning is as a network of interconnected communities of practitioners and learners who reflect, debate and elaborate instruments and share the results. They are academic experts, gathered around a discipline or theme within the conscious context of building mutual trust and confidence. They work in international, intercultural groups, communicating deep respect for the autonomy of co-participants at the institutional, country and regional level and generously sharing knowledge and experiences. They work in an organized system according to regional needs, remaining focused on accountability and goal-centeredness by articulating and evaluating clear aims, objectives and outcomes at every step of the road.

In addition to working with a common language to understand and compare issues in higher education, they also take part in reshaping a set of useful tools that have been developed by other academics and which they can continue to refine. They are able to participate in a platform of reflection and action about higher education, a platform in which, at present, communities of more than one hundred different countries participate. Thus, these participants become parties to the development of reference points for the disciplines, the degrees they represent, and levels of quality that continue to involve many who continue to share and refine the process Participants have the possibilities of networking with professionals in their own subject areas from many world regions and feel very responsible for this task. They enter a community of learners in which they experience the capacity to build and engage in a search for quality in higher education.

In turn, these communities seek engagement and commitment from both their respective institutions and from individual persons. The setting assumes their participation in meetings at which they work to advance the mutually defined and mutually shared tasks with a schedule that maintains

the momentum of timely progress toward goals but also time enough to be able to contribute. They are also required to have the capacity to listen and to share, of being prepared to take part in a joint building project. The group selects some to be their coordinators, becoming, in essence, members of the management committee of the given region.

Tuning is built on every person who takes a part in it and shares ideas, initiatives and doubts. It invites contributions from each hands-on academic and every professional who cares about education and future trends in his/her field. It rests on people from different regions of the world who share the project's goals and have the creativity and flexibility to adapt it to their needs. It is global because it relates to global standards, but, at the same time, it is local and regional because of the conviction and the effort to build together in fulfilment of their mission. In this context, the project tries to follow the needs and demands of the region. The only limit is quality.

The recent publication *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe, 1100-1500* (Crossley & Mews, 2011) asserts as a fundamental insight that all new ideas are developed in the context of a community, whether that community's basis is academic, religious, or simply as a network of friends. The Tuning communities have the challenge of making an impact on the higher education development of their regions.

2.3. Tuning Methodology

Tuning is a methodology with clearly designed steps but with a dynamic perspective that allows for adaptation to different contexts. It has some identified requisite steps, but its capacity in specific developments at regional level remains remarkably open. *The methodology has a clear objective*: to build compatible and comparable degrees that are relevant to society and that are intensively focused on maintaining and improving quality. These degrees need to be accepted by all the countries involved. This methodology explicitly calls for the process to value and preserve the valuable diversity coming from the traditions of each country. These requirements demand a *collaborative methodology*, based on a consensus being developed by experts from as varied a background as possible to be representative of the context in which higher education engages seriously and consistently with its real-world context. These experts are expected to have the capacity to understand the geographical negotiable and non-

negotiable realities as much as they must understand essential elements of the discipline and the degrees themselves.

2.3.1. Organizationally

The different steps take place in a succession of group meetings where the work is planned, debated, and jointly understood. The results are shared and discussed, preceded and followed by periods of work, consultation, and online and web communication that enriches the encounters and the joint actions taken. The academic discipline is the backbone of the debates that occur in these group meetings. Except for some transversal cases or requirement highlighted by the group that providing political backing, all the groups are discipline-based although the discipline can be understood in broad terms such as gender equality or humanitarian action. Every group is led by a coordinator/s, selected by the group and who, as a consequence, becomes part of the management committee. Every meeting is carefully prepared for by the general coordinators. The programme and documents showing the state of the debate are circulated electronically before the meeting so that all participants arrive fully briefed and prepared to engage in the on-going debate. These documents are also collected in booklets that mark the steps of the process and document it.

2.3.2. Thematically

The methodology has a clear aim: to develop degrees of quality and social relevance. These degrees must meet the criteria of being comparable and recognizable as region/institution specific but must also preserving the rich diversity within the regions. The methodology follows a number of questions/problems which mark its different steps:

Question 1. How can participants build mutually compatible and comparable degrees that are capable of being **recognized** by all participants?

The search for an answer brought the Tuning approach to conclude that a critical area of agreement should be the final outcome of the learning process. Meeting this criterion would allow the final end to be comparable within the participating group, recognised by members of that group and

respectful of the diversity represented among the participants. Thus, each successful degree required clear articulation of goals but also, very often a highly sophisticated negotiation process. Working towards achieving these three criteria pointed to one focal point: the importance of the degree profiles. This realisation next led to the exploration of how these profiles could be best described and developed. The consensus centred around *the competences and the learning outcomes as objective accomplishments that could be reality-based, rather than relying on rhetorical compatibility.*

Question 2. How to create **socially relevant** degrees?

In order to make degrees socially relevant, the degrees needed to be comprehensible to many actors at many levels of experience; they needed to contain criteria by which they could be evaluated and held accountable. They needed to be transparent, readable, and able to be consulted by participants from a variety of backgrounds and experience levels. To meet the demand for an understandable language led to the agreement that this language must be the *language of competences.*

Question 3. It was widely recognized that this moment of change in higher education offered the opportunity to reach the **highest levels of quality,** thus allowing students to go beyond the content to attain degrees that produced highly relevant learning?

Again the direction led participants to set, as a requirement for these degrees, their ability to be expressed in terms of competences. "Competence" itself was defined broadly, including knowledge and understanding, skills and values as well as capacity for autonomy and responsibility.

This is how the Tuning project began its work on a consistent system of developing degrees. The degrees would be competence-based and have students as the central focus. In other words, the critical focus of these degrees would be learners' development of competences that could be clearly evaluated by a number of different participant-groups. This methodology was developed around three axes that organized clusters of processes: The first axis was **the degree profile**, the second was **the degree programme** and the third was **the path of the learner**.

2.3.2.1. Approaches for the development of degree profiles

The degree profile holds a central position in Tuning methodology. Its satisfactory development is determined in relation to its manifest social relevance, to the quality of the entire degree and to recognition by other participant groups. The profiles guide the rest of the processes. They lead the entire degree, heavily influencing all other aspects of the degree.

The definition of degree profiles has advanced significantly as reflection and discussion has participated during the latest period of the Tuning project. Degree profiles were always clearly identified with the block of competences that must be developed to receive the degree. It was also the guiding element in the entire process of designing degrees. It is not surprising that, when the European Qualification Framework for Higher Education EQF was elaborated in 2005, the text introduces degree profiles by referring to Tuning as the leading force behind the development of degrees. The definition has remained simple and straightforward from the start. In fact, reshaping slightly the definition given in *A Guide to Formulating Degree Programme Profiles* (Lokhoff et al., 2010, p. 52), it is clear that a degree profile describes the specific characteristics of a qualification in terms of learning outcomes and competences. A degree profile describes in clear, understandable language what a learner should be expected to know, understand and do at the end of his/her learning experience.

After a long process of reflection and debate, initiated in first European countries, to clarify Tuning projects in Russia, Latin America, and Africa, this definition of the degree profile has emerged as a combination of forces around four poles:

a) The needs of the region (from the local to the more international context).
b) The meta-profile of the subject area, the structured points of reference.
c) The consideration of future trends in the profession and in society.
d) The specific mission of the institution.

2.3.2.1.1. Analysis of social needs and professional demands

The issue of social relevance is paramount for designing degree profiles. Without a doubt, the analysis of the relationship between university

and society is at the core of the theme of relevance in higher education. Social relevance in a degree profile, however, can take different forms such as being readable and understandable so that both students and employers can comprehend the essence of the training offered. It can also mean accountability and transparency. In addition, it can mean taking society into account and listening to the values and requirement of the different stakeholders. Built into it is the capacity to develop processes of consultation that can be a part of the designing of degree profiles.

Given the multiplicity of stakeholders and the different expectations that they have of higher education, striking a balance between employability, citizenship, and personal growth becomes a challenge. In an attempt to address such a challenge, Tuning has developed a specific methodology that has proved successful to build new design programmes (including reshaping existing programmes) that respond to these multiple aspirations. The Tuning consultation process also tries to identify the right mix of skills and their translation to curricula so that higher education graduates may be able to face current—and prospective—needs, to satisfy "global" demands, and to contribute to the betterment of their societies and immediate environments.

In addition to these broad social aspirations, other academic and labour imperatives must be met, perhaps most significantly, the needs of the knowledge society. The OECD, for example, stresses the role of tertiary education in fostering research, innovation and development, and suggests the development of educational policies in articulating clearly the nation's expectations of the tertiary education system and aligning priorities of individual institutions with the nation's economic and social goals (OECD, 2008).

Tuning aims at identifying and addressing the needs of the productive sector, of the economy, of society as a whole and of individual learners within a particular area of study as mediated by their specific social and cultural contexts. To strike a balance between these varied needs, goals and aspirations, Tuning has undertaken consultations with leading persons, key local thinkers and experts from industry, academia, and civil society, and working groups that include all stakeholders. These practices are explained below.

The search for relevance is one of the driving forces behind Tuning exercises that are destined to:

- Understand, discuss and enrich the definition of generic and subject specific competences.
- Reflect critically on the needs and the strengths of their own region and the thematic and professional fields related to their own field.
- Know how other regions of the world position themselves in this respect.
- Provide for a frame of reference for later individual degree profiling.
- Be aware of shortages and gaps present in the area.
- Reflect on the characteristics of the citizens who can best contribute to the culture of the region and to a world culture of democracy, sustainability and human rights, and
- Consult with other discussion groups selected in each of the academic communities.

To accomplish this first collective task of defining generic competences for the specific region, each Subject Area Group prepares a list of the generic/ transversal competences considered to be relevant to its perspective region. Its members first reflect on and discuss their own understanding of the socio-economic needs of the area. They, then, analyse lists found in the current literature and those selected by previous Tuning groups. This task is finalised when the group has understood, broadly discussed and reached consensus on a selection of competences thought to be most appropriate for the region. They approach this task from a rich intercultural perspective since the participants come from different countries and cultural backgrounds. The final stage occurs at the general group level where understanding, debate and agreement must be reached for all of the Subject Area Groups involved. It is a process of enrichment and responsibility-raising awareness that focuses on relevance and is expressed in the common language at group level. This task is also conducted with the subject-specific competences.

It is necessary to undertake this major check on relevance in the context of the entire list of socio-economic needs which has been identified and agreed upon. The analysis seeks to measure the degree to which the broader society sees these competences, as selected by academics, as leading to basic required levels of employability and active citizenship. This search for relevance has recently been redefined as "preparing for sustainable employment; preparation for life as active citizens in democratic societies; personal development; development and maintenance, through research, teaching, and learning, of a broad, advanced knowledge base" (from the Committee of Ministers to member states on the public

responsibility for higher education and research cited in Samardži´c-Markovi´c, 2013, p. 7). It is this personal, professional, institutional and social responsibility, which may be referred to in different ways and which may respond to the necessity of placing knowledge and capacity at the service of social development and innovation.

The next task relates to the process of consultation. This requires (1) understanding the reasons behind the consultation as well as the value attached to this practice; (2) selecting the mode of consultation which participants agree is most appropriate; (3) understanding the technical requirements; (4) acknowledging the existing traditions and literature; and (5) identifying, discussing and agreeing on the most relevant groups to be consulted (other academics, employers, students, graduates, professional bodies, government bodies, associations of citizens, platforms, think-tanks...).

Once the mode of consultation has been agreed upon and the process has been completed, the final stage in this practical exercise of searching for social relevance refers to the analysis of the findings. This exploration is carried out jointly by the group, which takes special care not to lose any of the contributions emerging from different cultural perceptions. These perceptions should enlighten the understanding of the concrete reality, define the most urgent needs, pinpoint recognised strengths, weaknesses, opportunities and threats, and plan for them in terms of educational measures, taking into account the characteristics of the specialists and the citizens whose combined perspectives are most valuable in offering an answer.

The specific process followed in Tuning Russia project is explained in detail below.

2.3.2.1.2. The development of meta-profiles for the area

It is in the tradition of Tuning to build reference points for each of the fields and to offer an understanding of the specific academic area. Communities of Learning from different parts of the world have identified the core elements in terms of competences which would make a degree identifiable and hence recognisable. It is the knowledge of and the joint debate about each specific academic area that most tellingly identifies the work of Tuning. The process of using the five questions below leads the experts to the reference points:

- They analyse from their particular background, how the academics in each group would define their specific area?
- Which competences are the core contributions of each area to the development and advancement of society?
- Which are the core elements in a particular subject area or field of knowledge and how may they be determined?
- Which competences can be considered core for those attaining a qualification in this particular field and at each of the levels?
- Which competences, although not core, are most needed in the region?

The intercultural debates end with the final selection of competences that can define the specific cohorts of learners who achieve a degree in a given field.

The need to build degrees capable of being recognised in the European Higher Education Area was one of the earliest aspirations of the Tuning experience. Debates on the core elements of every area constitute an essential process in Tuning. Such debates seek to define and highlight the collective understanding of a particular field and to achieve agreement on what constitutes core (as opposed to diverse or specialized) competences. It is critical to differentiate between the core elements and the specialized aspects introduced for different reasons into the different subject areas. The goal of this work is to build and discuss lists of competences in the different regions, giving participants ownership over the comprehension of each of the fields as well as ownership of the results. This finding has been significant and useful in different parts of the world.

However, during the last two years, a new step has been developed: Tuning participants have undertaken a further exercise beyond providing the reference point: that of analysing the classification, structure, and desired weight attached to each point of reference. Discussion of questions concerning how such points of reference could be grouped, their linkages, and their comparative importance, have led to the creation of meta-profiles. Tuning Subject Area Groups (SAGs) are prepared to carry out this task at the regional level because they are genuine Communities of Practice, formed of highly experienced academics in their respective areas (Eckert, 2006). Furthermore, the Tuning Communities are continually open to parallel groups from other regions and other academic fields/ areas of practice and can, therefore, be truly considered Communities or Networks of Learning (explained below). Thus, Subject Area Groups not only agree on the lists of components that identify the core and the

level of diversification but take the next necessary step of classifying the findings and creating a structure that communicates how they understand the relationship of the components to each other. These are called meta-profiles.

Thus, a meta-profile represents the structure and combination of competences that give identity to a subject area. A meta-profile is a mental construct that categorizes competences into major recognized components and illustrates their interrelationship.

The meta-profiles have become effective tools for achieving understanding of a field of study at the level of the individual region. One advantage is their capacity to create collective understanding of and to raise the level of the debate about essential versus secondary elements in, for example, tourism, economics, social work or environmental engineering. This collective understanding is important in reaching a common comprehension of degrees since it focuses on the centrality of the reference points and their respective weights in an educational programme. Third, once this collective understanding is reached, it offers the possibility of reflecting on and discussing further the combination of elements. Such reflection and debate normally lead to greater depth and accuracy in understanding and to higher quality.

The second contribution relates to recognition, or the validation of a learning experience. Among its meanings is the validity of an academic qualification acquired in one country when its holder enters another country, either to enter the labour market or to enrolling in a postgraduate programme in that country. Tuning maintains that recognition depends on having proof of having achieved the desired set of outcomes. This approach allows for a broad variety of routes, approaches and processes to achieve the goals. Historians, for example, can study past developments in different geographical settings. They can do so by reference to a very wide range of methodologies. They can also explain contexts citing different traditions, variations of cultural institutions and events that belong to different settings. However, the outcomes should be comparable in terms of the graduates' capacity to analyse societies in their evolution across time and transparent in the methodologies and rigour used in their research or in the language in which their findings are presented while allowing for academic debate to continue and deepen.

The conscious decision to focus on outcomes leads directly to the relevance of meta-profiles for recognition. Meta-profiles present an understanding

not only of the core elements and their description but also of their identification and explanation in a readily understood and shared language. They offer the location, importance and weight of the different factors that make up the whole image. The meta-profiles give the contours within which degrees can be identified and recognised because the key elements are clearly portrayed and lucidly described.

The third advantage of developing meta-profiles is the possibilities they offer in the development of joint degrees. Through the consideration of the meta-profile, a degree profile's main elements may be identified and responsibilities for its construction be shared, based on a common understanding of the whole area. In this age of transnational degrees, tools that foster common understandings are particularly helpful.

Finally, meta-profiles provide a new and different path to regionalisation (cf. Knight, 2012) and ultimately to globalisation. The Tuning process builds meta-profiles are jointly built, owned and later validated at the regional level (e.g., Europe, Russia, Latin America, Africa). A logical next step is the further level of comparison with other world regions with the ultimate goal of eventually achieving harmonisation at global level. These further steps, like the entire Tuning process, occur through a bottom-up approach, that is, from the regions upwards. At these final two stages, each region owns its own processes and may agree to compare or share with another only if, when and to the extent they choose to do so. In this way, the Tuning methodology respects the core validity of local elements which are at the heart of the process. The significance of this difference in developing global indicators cannot be overestimated. Using a bottom up, rather than a top-down process, creates a new and improved path to reach global indicators.

This process required a great deal of genuine intercultural dialogue to achieve understanding of how to locate the different competences in each degree. The experts, with their different countries of origin, linguistic backgrounds, cultural traditions and professional careers, arrived at an understanding of the main elements to be considered.

They were able to discuss how the different elements interrelated and the level of centrality they occupied.

In working on the problem of degree recognition, these experts found it extremely useful to weigh the significance of the core competences against those located more in the periphery.

Each Subject Area Group contrasted the meta-profile with a number of universities in the different countries to determine which elements were either missing or over-represented and how to improve the degrees in the various contexts.

Very much to the point, this meta-profile serves as an on-going reference for developing degree profiles in terms of the specific region's needs.

Finally, meta-profiles will be used to compare and contrast the regional perspective with meta-profiles developed by other geographical areas in a bottom-up way of reaching a global perspective.

2.3.2.1.3. Consideration of future trends

The present concern for the relevance of higher education means a preoccupation with today's social needs. Higher education can help meet those needs, but it also provides a process by which to evaluate the influence of degrees in shaping future societies and in anticipating social, economic, cultural and political changes. Designing degree profiles is basically an exercise in looking into the future. In the present context, it takes time to plan, develop and approve degrees. Students need years to earn their degrees and mature in their learning. They are called to prepare themselves to act, serve, innovate and transform future societies and to meet future challenges. Profiles should look as much—perhaps even more—to the future as to the present. Taking into account future trends in the specific field or fields where the degree is located is a requirement of quality.

The Tuning project in Latin America took up this aspect of the task and initiated a methodology for introducing the analysis of future trends in the designing of profiles. In preparing to undertake this study, participants reviewed key contributions in the field of future and foresight studies, revealing how well developed and sophisticated this field has become. Thus, methodology was adapted to the task-specific context, emphasizing some steps and opening the way for further analysis. The aim of this group was to identify and draw conclusions jointly on the changes and drivers for change present in society and the predictable challenges that would occur in the next twenty years. Participants, using these projected challenges, developed a number of possible scenarios and considered the implications for each of the specific scientific and professional areas. A further step was reflecting on the implications for each scenario that new professions

or professional approaches or tendencies would emerge. A very relevant aspect in the analysis was the focus on the new competences required by the general trends or by the specific context, scenarios and professions emerging in the future and how these factors can shape the future of the education in general and of degree profiles in particular.

In the case of Russia, this exercise has yet to be taken beyond the project but will surely bring new elements of reflection and quality into the development of degree profiles.

2.3.2.1.4. The mark of the university where the degree is anchored

Finally, another consideration in degree profiling is the university where the degree is anchored. An important achievement in the post-Bologna phase is that degrees have become an institutional venture, a fruit of collegiate activity in both design and delivery. At present, virtually every institution of higher education has articulated a mission, a vision and a set of values that it proclaims to follow. This characteristic was rate in many parts of the world before the 1990s.

Consideration of the context added by the individual university requires reflecting on the processes of differentiation manifest in the world of higher education institutions. Thus, Van Vught (2010) considers that the educational literature is clear about the desirability of diversity as one of the major factors associated with the positive performance of such higher education systems. Based on previous literature, he summarises the arguments in favour of an increase in diversity as: (1) an important strategy to meet student needs, offering access and opportunities to people from different backgrounds who require an educational environment more suited to their needs; (2) a way to favour social mobility by providing multiple forms and points of entry, transfer and exit, which thus allows a system for correcting errors caused by poor choice and encouraging further opportunities for success; (3) a means to meet more adequately the diverse needs of employability; (4) a way to serve the political needs of interest groups in society to achieve their own identity and legitimisation; (5) a strategy to permit the important combination of elite and mass in higher education; (6) a means of attaining high effectiveness due to the concentration of skills and their dedication to performing specific tasks; (7) a context to experiment with innovation without having to implement innovation at all institutions and allowing for low risk in this experimentation.

This diversity can certainly be fostered in the definition of these institutions' degree profiles. In this context, diversity will predictably have an international impact if the institution has an international orientation rather than a regional commitment, for example, and, as another example, a number of research profiles in its degrees if the institution prides itself on being research-driven rather than focusing on applied science.

The identification and even the strategy of working towards a specific real or desired profile of a higher education institution can be equated to a strategy of striving for quality, attempting to build on institutional strengths as well as being a way to foster the realization of the university mission. Once the university mission is declared, it will influence the degrees offered by that same university as a sign of quality, service and mission consistency.

2.3.3. Degree Programme

The degree programme deals with the length, level and definition of the programme in terms of competences and learning outcomes; it also analyzes the methodologies for developing the appropriate strategy of teaching, learning and assessing those competences as well as setting up the internal systems for assuring programme quality.

2.3.4. The learner's path

The individual learner's path is the point of departure. It includes his/her style of learning, personal objectives, his/her motivations, difficulties and above all strengths.

Identifying the learner's path is the task for future developments of Tuning in Russia. The commitment of the experts and their proven capacity can make an impact, first with the development of degree profiles of high quality but later with providing excellent ways of implementing them to take a significant step into the development of high-quality performance in the region.

2.4. References

CROSSLEY, J.N. & MEWS, C.J. (eds.). (2011). *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe, 1100-1500*. Brepols Publishers, Turnhout.

ECKERT, P. (2006 [online edition]). «Communities of Practice». In K. BROWN (ed.). *Encyclopedia of Language and Linguistics* (pp. 683-685). Elsevier Ltd., Amsterdam. Retrieved from: http://www.sciencedirect.com/science/article/pii/B0080448542012761.

KNIGHT, J. (2012). «A conceptual Framework for the Regionalization of Higher Education in Asia: Application to Asia». In HAWKINS, J.N.; MOK, K.H. & NEUBAUER, D.E. (eds.). *Higher Education Regionalization in Asia Pacific: Implications for Governance, Citizenship and University Transformation* (pp. 17-36). Palgrave Macmillan, London.

LOKHOFF, J.; WEGEWIJS, B.; DURKIN, K.; WAGENAAR, R.; GONZÁLEZ, J.; ISAACS, A.K.; DONÀ DE LA ROSE, L. & GOBBI, M. (2010). *A Tuning Guide to Formulating Degree Programme Profiles*. Groningen, Bilba; and Publicaciones de la Universidad de Deusto, The Hagye.

OECD (2008). *Tertiary Education for the Knowledge Society.* OECD Publishing, Paris.

SAMARDŽI´C-MARKOVI´C, S. (2013). «A Word from the Council of Europe's Director General for Democracy». In BERGAN, S.; HARKAVY, I. and VAN'T LAND, H. (eds.). *Reimagining Democratic Societies: A New Era of Personal and Social Responsibility* (pp. 7-8). Council of Europe Publishing, Strasbourg.

VAN VUGHT, F.A.; KAISER, F.; FILE, J.M.; GAETHGENS, C.; PETER, R. & WESTERHEIJDEN, D.F. (2010). *U-Map: The European Classification of Higher Education Institutions.* CHEPS, Enschede. Retrieved from: http://www.u-map.org/U-MAP_report.pdf.

Chapter 3

Tuning Russia project

Ivan DYUKAREV

3.1. Project description

3.1.1. Needs

Russia joined the Bologna process in September 2003 at the Berlin Conference of European Ministers in charge of Higher Education. Signing the Bologna Declaration has led to a series of reforms in the educational system of the Russian Federation. Higher education institutions have faced the need of the implementation of the third-generation Federal State Educational Standards which are based on the principles compatible with the Tuning methodology, namely, application of a student-centred approach, modular system and ECTS, increasing the variety and number of elective courses, ensuring the quality of the programmes and taking into account professional qualification and labour market requirements, etc. Likewise, Russian Universities have been sorely lacking the competence-based approach and methodology for designing and development of comparable and compatible higher education programmes. Thus, the interest in active application of the Tuning methodology for the designing of educational programmes in different areas in Russia has increased significantly.

3.1.2. Partners

In order to address abovementioned needs, the **Tuning Russia**[1] project (TEMPUS[2], **2010-2013**) has been designed as university-driven project with

[1] Tuning Russia, http://www.tuningrussia.org/

[2] Tempus Programme, http://www.eacea.ec.europa.eu/tempus/index_en.php

contributions of academic and administrative staff members from Russia and different European countries.

> The project has brought together **4 EU universities** (the project coordinator - **University of Deusto**, Bilbao, Spain; University of Groningen, Groningen, Netherlands; Trinity College Dublin, Dublin, Ireland; University of Padua, Padua, Italy), **13 Russian Universities** (Astrakhan State University; Don State Technical University; Moscow State Academy of Business Administration; Moscow State Oblast (Region) University; Lomonosov Moscow State University; Moscow State University of Railway Engineering; N.I. Lobachevsky State University of Nizhni Novgorod; Yaroslav-the-Wise Novgorod State University; Russian State University for the Humanities; North Caucasus Federal University; Tver State University; Lev Tolstoy Tula State Pedagogical University; Udmurt State University) and **the Association of the Classical Universities of Russia**.

The project partners have been selected to best suit the sharing of Tuning expertise and dissemination of the Tuning methodology. The EU partners are all members of Tuning Management Committee and have a substantial history of collaboration, including the joint coordinators of Tuning projects. The Russian partners all have substantial experience of EU and wider international cooperation, both in terms of student and academic staff mobility and educational innovation initiatives. They brought to the project highly professional academic staff willing to develop and improve their competences in making academic curricula transparent and comparable. Professors are backed up by university administration members who in turn backed up by local authorities. These thirteen universities represent various regions of the Russia and enjoy strong cooperation relationships with other education and research institutions in their respective regions, as well as with local employers and business sector in general.

Besides that, participation of the Association of the Classical Universities of Russia that comprises the old and most reputable universities which enjoy prestige and influence throughout the country and are well known abroad, allowed to increase the outreach of the project drastically, while keeping the initiative feasible. The Association's role as the project Co-Coordinator in Russia is seen as the strong point of the project.

3.1.3. Objectives

The Tuning Russia project, in order to achieve its **overall objective** – to contribute to the implementation of Bologna tools in Russian higher education institutions, tries to institutionalise the use of the Tuning methodology in the Russian Federation's educational practice through the achievement and realisation of the following **objectives**: (1) promotion of Tuning methodology among Russian academic community; (2) development of curricula using the Tuning methodology of nine subject areas: Ecology, Economics and Management, Education, Environmental Engineering, Information and Communication Technologies, Languages, Law, Social Work, and Tourism; and (3) establishment of Tuning Centres at Russian Universities with aim to promote the implementation of Bologna Process in Russia.

Following one of the basic Tuning principles, the Tuning Russia reflects the idea that universities do not look for the harmonisation of their degree programmes or any sort of unified, prescriptive or definitive curricula; but, simply for points of convergence and common understanding. The protection of the rich diversity of education has been paramount in the Tuning project from the very start and the Tuning Russia project in no way seeks to restrict the independence of academic and subject specialists, or damage local and national academic authorities. In contrary, Tuning Russia looks for common language and common reference points for different stakeholders and communities involved in higher education.

3.1.4. Activities

In order to achieve its objective, the project activities have been distributed around General Meetings - project milestones.

First year of the project was aimed at formation of subject area groups, definition of competences for every subject area, consultation with stakeholders and analysis of survey results, followed by formulating Reference Points and Programme Profiles including learning outcomes. Kick-off meeting and initial training took place in Lomonosov Moscow State University, 29-30 October 2010, in order to set up project environment, establish Subject Area Groups, Committees, and initialise work on discussion on generic and subject specific competences. It included training on Tuning approaches and methodology and competence based learning.

The First General Meeting, training and conference took place in Russia, Rostov-on-Don, Don State Technical University, on April 26-29, 2011. It included training on survey technology and procedure of consultation process with stakeholders. Key stakeholders have been asked to analyse the competences for a concrete subject area at a particular level. Survey results have been presented at Second General Meeting, training and conference in Spain (Bilbao, University of Deusto, 16-20 October 2011). Meeting has validated the lists of competences and provided the training for formulating Degree Programme Profiles, as well as experience of UD in the implementation of competence based learning.

Second year of the project was aimed at staff training, development of degree profiles and educational modules. For that reason, three EU Meetings have been organised at EU partners: University of Groningen (The Netherlands, Groningen, 7-11 March 2012), University of Padova (Italy, Padova, 25-29 March 2012) and Trinity College Dublin (Ireland, Dublin, 16-20 April 2012).

The first version of Reference Points and Degree Programme Profiles has been presented in the beginning of the third project year at Third General Meeting in Brussels, 19-24 November 2012. This meeting was organised in connection with the International Conference "Tuning in the World: New Degree Profiles for New Societies"[3] and High Level International Policy Forum "Higher Education and Employability – Current Policies and Future Trends". The Conference and Policy Forum were co-organised by the Tuning Academy[4] and the Directorate General for Education and Culture of the European Commission. It brought together representatives from universities in Africa, Latin America, Russia, Central Asia, Thailand, USA, Canada and Japan, representatives from European universities involved in the initial Tuning process, Tuning experts, Higher education associations and Member state agencies present in Brussels, Embassies, Foreign missions and Commission services.

Third year was dedicated to the setting up the Tuning Centres at Russian Universities and implementation of Tuning methodology at local level.

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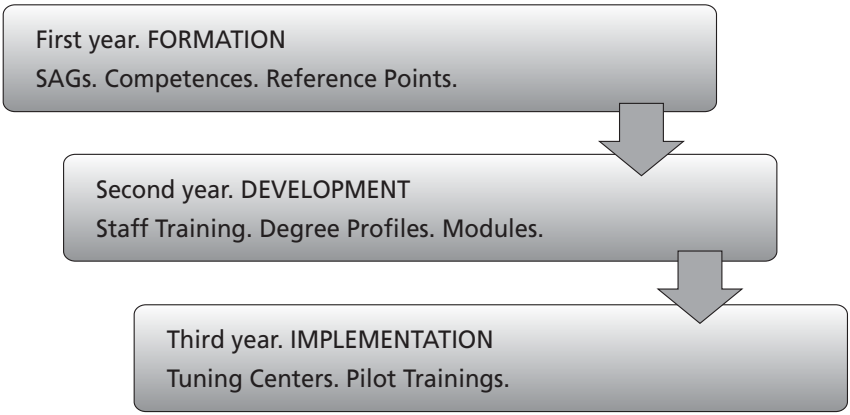
[3] "Tuning in the World: New Degree Profiles for New Societies", http://ec.europa.eu/education/external-relation-programmes/tuning_en.htm

[4] The International Tuning Academy, http://www.unideusto.org/tuningeu/tuning-academy.html

Peer review and assessment of the quality of the elaborated results have been ensured by participation of European experts in the opening of the Tuning Centres and pilot trainings at every Russian partner University (12 training sessions during 14-24 June 2013, 1 training – 19 September 2013). Thereafter the International Conference "Tuning in Russia" took place in Russia, Lomonosov Moscow State University, 20-21 June 2013, and the main results of the project have been presented to the Ministry of Education and Science of Russian Federation and wide Russian academic community.

Logic of the project is presented in the following picture:



3.1.5. Main results

The Tuning Russia **Reference Points**[5], one of the main academic and methodological **outcomes of the project**, are non-prescriptive indicators and general recommendations formulated in terms of competences and learning outcomes which aim to support the design, delivery and articulation of degree programmes in various subject areas. Unlike the Federal State Educational Standards which are developed separately for each cycle, Reference Points represent a single document for all

[5] The Tuning Russia Reference Points , http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia

three cycles, thus ensuring the unity and continuity of approaches for development of educational programmes within subject area.

Reference Points

Every subject area is described both in terms of scientific application and professional activities. Specific features of subject area in Russia are described in comparison to the European and/or other educational systems. Much attention is drawn to the relationship of higher education programmes of described area with higher education programmes in other areas. This is especially important in the development of degree programmes for second and third cycles, for identifying the learning opportunities for those who have different educational background.

The typical degrees offered within presented subject area in the Russian Federation are described for different cycles, with special attention for the differences in approaches to programme implementation within this subject area in Russia and other regions in the world. Typical occupations of the graduates in area are presented mainly by types of employment typically found by graduates depending on the programme cycle.

The competences and learning outcomes described in accordance with the Tuning methodology, including process of competence selecting, consultation with stakeholders, formation of the meta-profile, formulation of learning outcomes and describing the cycle level descriptors.

The **training of experts**, which is an essential "human resource" part of the project and its **one of the main outcomes**, ensures that the dissemination and implementation of the Tuning methodology which has started within the project's lifetime will continue beyond. Expert team of the project includes **92 academic and managerial staff.** Highly skilled **team of 75 academics** (Annex 1) are presented in **9 subject area groups** and **28 managers of higher education** (12 of them also members of SAGs, Annex 2) which together with academics have developed and run training courses for various target groups, thus multiplying the number of experts and contributing to better understanding of the Bologna ideas. Apart from training courses and programmes at home universities,

the round tables, discussions and workshops have been organized by Association of the Classical Universities of Russia in collaboration with the Russian universities throughout the Russia. Academics, non-academic university staff, and students of non-project universities have been reached, therefore ensuring that agents of change appear at every level of academia in every region of Russia.

One of the **main results of the project** —network of **Tuning Centres in Russian Federation**— is also considered as a main issue of **sustainability of the project outcomes and overall impact** on the system of higher education **in Russia**. Converting the Tuning Centres into an actively collaborating network and catering for the widest target audience possible should make a general attitude change feasible and ensure that Russian HEIs throughout the country will pick up the implementation process and continue towards the change for Tuning-inspired teaching and learning after the project finishes.

For abovementioned reasons, in order to ensure implementation of Bologna tools and Tuning methodology, the creation of **Tuning Centres**[6] is included in the development strategy of Russian participating universities. The Centres also foreseen as institutionalised tool to establish and support links with employers, graduates and academicians in the area of programme design and implementation.

3.2. Specificity of Tuning Russia among other Tuning projects

The Tuning Russia project has following main precedents in the history of the Tuning: 1) the **network of Tuning Centres** within one country, 2) the application of evidence approach for the formulation of learning outcomes and **assessment of generic and subject specific competences**, and 3) attempts for **evidence-based policy making** in higher education based on findings of the project.

3.2.1. Network of Tuning Centres

The Tuning Centres have evolved during the Tuning Project and before the Tuning comes to Russia in 2010-2013 there were three types of Tuning

[6] Tuning Russia, http://tuningrussia.org/

Centres: European Tuning Information and Counselling Centres (ETICCs); Tuning Information Points (TIPs); and National Tuning Centres (NTCs). The first two types of centre were established in Europe during Tuning Europe (TEU, Phase 3), before the comprehensive documentation on the Tuning website became available, to assist individual teachers, Universities and Sectors to adapt to the Bologna Process using Tuning methodologies and project outcomes. The third type was created during the Latin America Tuning Project.

- European Tuning Information and Counselling Centres. ETICCs are located at the two universities who have jointly coordinated the project Tuning Educational Structures in Europe and all over the world. These continue to offer information, research and training in the 'Tuning of European Higher Education' products and methods. Recently, in 2011 they have been transformed in the International Tuning Academy[7] which is the successor of ETICCs.
- Tuning Information Points. A TIP was created in each participating country where a contact person, who had played a significant part in the Tuning Europe Project, has made electronic information about the project and its panels of experts available nationally even after completion of the project.
- National Tuning Centres. NTCs were established late in the first phase of Tuning Latin America (TLA) and have the mission of linking the project to its setting and transmitting to all members the responses of the system in their area in relation to the debates that are taking place within the project. The role played by the NTCs, which include representatives of the highest decision-making bodies in the field of university policy in each country (Ministries for Education, Conferences of Principals, University Associations, Accreditation Agencies, etc.) is important. They represent the spokesperson and the link between the project and their country.

  Tuning Centres are created after the first phase of training is complete or nearing completion, to promote the aims of a given Tuning Project within its legal and cultural context. Existing models may not suit the needs of other Tuning projects. Therefore, it is important that a wide

[7] The International Tuning Academy, http://www.unideusto.org/tuningeu/tuning-academy.html

consultation take place within that project before establishment of such centres.

Following this procedure, after the wide consultation with all project stakeholder in Russia, the following model of Tuning Centres in Russian Federation has been elaborated and implemented at its first phase.

3.2.1.1. Network of Tuning Centres in Russian Federation

As it was planned, **Tuning Centres** in Russia (list of Tuning Centres is available at http://www.tuningrussia.org) have been established for the continued dissemination of the Tuning methodology, the project outcomes and for information on the Tuning materials that are available for use also after the project period has ended. This requires the setting up of **different stages**, as well as the organisation of structures to facilitate the actual use of the Tuning approach.

Each **Tuning Centre** is an institutional structure which must **operate in a co-ordinated manner** with the International Tuning Academy and other Tuning Centres in Russia. The organizational form of Tuning Centres will be defined by each University but it should be located in a department/ unit/office of the University. For that purpose, the Universities involved in the project should provide room and equipment (this will be considered co-funding in the project) and support staff in charge of the Tuning Centre.

There are **three stages** which could be followed by the Tuning Centres:

1. Dissemination (*Basic level*).
2. Consolidation (*Advanced level*).
3. Training (*Expert level*).

1. Dissemination

Therefore, the basic aim of the Tuning Centre is *to disseminate* the material developed so far within the University. Although a lot of attention has been given to the visibility of Tuning Russia during the first two years, a more structured strategy is required, to make the outcomes known to all

relevant players on institutional level. The main tasks of Tuning Centre at this stage are:

- Distribution of information and instruction material (developed in Tuning Russia project and other Tuning projects in the world) within the institution.
- Assisting in the organisation of dissemination seminars and conferences at institutional level (internal level).
- Offering information and counselling at different stages at the University (departments, faculties, academic staff, students, etc.).
- Acting as an interface between the institution and the International Tuning Academy.

All Tuning Centres should fulfil these activities of dissemination. Each Tuning Centre should prepare a work plan on dissemination and send to the International Tuning Academy. At the end of each year a report describing the activities developed, results achieved and other comments should be submitted to the International Tuning Academy for evaluation and confirmation of the level of the Centre.

2. Consolidation

The main aim of this stage is *to consolidate* the outcomes of the Tuning Russia project within the University. At this level, some Tuning Centres could decide that their purpose is not only to disseminate results but also to realize actual implementation in practice. This implies an advanced level and is not compulsory to all Tuning Centres to develop this stage. The main tasks at this stage are:

- Invite as many subject areas as possible at the University to define reference points for their disciplines.
- Assist other subject areas at the University level in the use of the Tuning methodology and its related tools and products.
- Design degree profiles following Tuning methodology.
- Strengthen and improve the foundation of the Tuning approach, academic community at the University will be ask to reflect on its methodology of degree profiles on the notions of social needs, available resources, meta profiles and competences and learning outcomes.

- Collecting main obstacles and questions regarding the implementation of the Tuning approach at institutional level.

The process of consolidation should be accompanied by a structure for finding answers to questions that will be raised and problems that will be brought forward during this process at the University level. It is thought necessary that each Tuning Centre **developed research lines** linked to Tuning Academy.

Each Tuning Centre should prepare a work plan on consolidation (explaining expected outcomes, stages, activities, resources, etc.) and send to the International Tuning Academy for feedback. The International Tuning Academy will evaluate the proposal and make comments for the procedure. An evaluation of the process will be developed by the International Tuning Academy checking the design of the different degree profiles based on the Tuning methodology. At least **75% of the degree programmes** must be (re)designed using Tuning approach in order to continue with the next stage.

3. Training

The main aim of this stage is to *go further in the consolidation and implementation* phase of Tuning at institutional and national level. The different subject areas at University level will reflect and evaluate the material that has been developed by them during the consolidation phase and provide internal and external training. The Tuning Centre will also be used as the vehicle (think tank) to find answers to new issues raised, which are related to the use of the Tuning approach in practice in new fields (for example new skills for new jobs). These training activities must be strengthened by research developed jointly among Tuning Centre and Tuning Academy. The main tasks at this stage are:

- Organise internal training seminars/workshops for the implementation of competence-based programmes and Tuning approach within University (how to teach, learn and evaluate competences).
- To encourage the use of the Tuning methodology and related tools and products to other universities at national level.
- Organise training (together with the International Tuning Academy) for the external community at national level.

- Provide counselling to other universities in relation to implementation of Tuning methodology.
- Produce instruction material and guidelines how to use the Tuning approach in the most effective way at national level. This implies the promotion of best practice examples of learning outcomes and competence based cycle programmes as well as best ways of preparing and writing learning outcomes phrased in terms of competences on programme and course unit/module level.
- Participate in international activities lead by the International Tuning Academy.

This stage will start after the completion of Consolidation phase. Each Tuning Centre should prepare a work plan for the training activities and send to the International Tuning Academy for its approval. Tuning Academy will evaluate the proposal and make comments for the plan. The International Tuning Academy could collaborate in some of the training seminars/workshops.

3.2.2. Assessments of Competences

At some particular moment in the process of educational reforms, experience shows that it is not sufficient to desire change, or even to programme it at a general or institutional level. It is absolutely required to base these changes on well developed and thought through processes which are accompanied by selected tools.

It is obvious that it is not enough to identify the profile of a degree or to define the competences and their weight in the programme. It is also critical to be able to identify levels and their indicators to be able to measure the desired or expected learning outcomes. It is critical to be transparent about how these outcomes will be evaluated, knowing that there should be a consistency line between evaluation and the way learning outcomes are taught, learned and assessed.

While proposal for the assessment of generic competences[8] was studied in detail in the University of Deusto, consortium of the Tuning Russia project

[8] Villa Sánchez, Aurelio *et al. Competence-based learning. A proposal for the assessment of generic competences.* Edited by Aurelio Villa Sánchez and Manuel Poblete Ruiz. Bilbao: University of Deusto, 2008.

decided to use the same methodology for subject specific competences. In total, more than 100 competences in 11 subject areas have been described by levels of achievements, indicators and descriptors. In Tuning Russia project it was suggested to use three levels for the development of a particular competence based on five indicators (examples are available at http://www.tuningrussia.org). Every description of competence also includes information on 1) Interaction with other competences, attitudes, interests, values; 2) Importance of this competence for academic and professional life; and 3) How to incorporate it into the academic curriculum.

It is important to emphasize that the way competences are handled in this publication is one way to implement educational reform. Naturally there are others. One can imagine that also two or four levels can be indicated based on a different number of indicators. This is purely up to the teams responsible for developing degree programmes. What is of crucial importance, however, is that these decisions are based on reflection and discussion as it was done in Tuning Russia project.

3.2.3. Evidence-Based Policy Making

The Tuning primarily focused not on educational systems, but on educational structures and content of studies. Whereas educational systems are primarily the responsibility of governments, educational structures and content are that of higher education institutions and academics. However, the Tuning research findings at the subject and academic levels can be used as an evidence for the policy making at university, national and international levels.

While academicians and practitioners look mostly for empirical evidence and clear and precise answers that can be put into practice, politicians and policy makers seek research results that can be used in politics and decision making. This political interest is related to a better configuration of the relationship between research, policy and practice in education and training. For that reason, the creation and diffusion of knowledge is not enough. For evidence in education policy and practice ..."we need to reduce the gap and devise new mechanisms for implementing research findings"[9].

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[9] DG Education and Culture of the European Commission, Odile Quintin, Director - Symposium 'Knowledge for Action – Research Strategies for an Evidence-based Education Policy', 28-30 March 2007 in Frankfurt am Main, during Germany's EU Presidency.

Available information and strategies often does not provide the tool or methodology to design, develop, implement and evaluate competences (a dynamic combination of knowledge, understanding, skills, abilities and attitudes) and competence-based degree programmes, which are the essential elements necessary for higher education decision-making at institutional and national levels, either because the rigorous research relevant to policy needs has not been conducted, or the research that is available does not suggest a single course of action.

For that reason, the Tuning process and findings at university and subject area levels can be served as a successful example of bottom-up approach of policy-making for higher education managers and policy makers of all levels. Thus, in Tuning Russia project, the evidence-based policy making is ensured by direct participation of the rectors of Russian universities in the project. Many of them are general directors of related Tuning Centres representing them at the Ministry of Science and Education of the Russian Federation.

Following the initiative of the Tuning Russia project – Russian High Level Policy Forum which was part of High Level International Policy Forum 2012 and "Tuning in the World: New Degree Profiles for New Societies" Conference[10] in Brussels, 21-22 November 2012, whose participants from Russia were more than 120 people, including rectors and vice-rectors of Russian partner universities, the Ministry of Science and Education of the Russian Federation recommends to use the Tuning methodology for the modernisation of the Federal State Educational Standards in part of generic and subject specific competences. The network of Tuning Centres in the Russian Federation is considered by the Ministry of Science and Education of the Russian Federation as one of the main expert pool for all Tuning and Bologna process related themes and initiatives.

[10] "Tuning in the World: New Degree Profiles for New Societies". Conference http://www.ec.europa.eu/education/external-relation-programmes/tuning_en.htm

Chapter 4

Profiling

Pablo BENEITONE

A. Generic Competences: an overview of the consultation and analysis process in Russia

One of the main objectives of Tuning is to contribute to the development of easily readable and comparable degrees at global level. For that purpose, Tuning proposes to look at the degrees in terms of competences and learning outcomes. Tuning deals with two types of competences: generic competences and subject-specific competences. In this respect, while the subject area related competences are essential for any degree and refer to the specific attributes of a field of study, the generic competences identify shared attributes which could be general to any degree. In a changing society where demands tend to be in constant reformulation, these generic competences become of great importance.

Change and variety of contexts both require a constant check on social demands for degree profiles. This underlines the need for consultation, and constant revision of information on adequacy**.** The language of competences, since it comes from outside higher education, could be considered more adequate for consultation and dialogue with groups not directly involved in academic life, and can contribute to the necessary reflection for the development of new degrees and for permanent systems of updating the existing ones.

In Tuning, the need for consultation responded to the wish to initiate a joint discussion on this field of competences with groups from inside and outside academia. Furthermore, the attempt to gather updated

information for reflection on possible trends and the degree of variety and change all over the world also inspired the relevance of consultation in Tuning methodology.

The Tuning Russia project began at the end of 2010 and one of its first tasks was to define generic competences for Russia. Each Subject Area Group (Ecology, Economics and Management, Education, Environmental Engineering, Information and Communication Technologies, Languages, Law, Social Work, and Tourism) was asked to submit a list of the generic competences considered to be relevant to their perspective. As a starting point for preparing this list, they were given the 31 generic competences identified in Europe[1], 27 generic competences identified in Latin America[2] and a range of contributions from different participants in the project.

A compilation of the generic competences proposed by subject area groups was presented in draft form, and they agreed a final list. It was decided to present a final list of **30 generic competences** and define the characteristics of further consultation: who should be consulted, how many agents should be consulted and the way in which the process should be carried out. It was further agreed that the participating universities should perform the consultation on generic competences, through the areas of the project on which they were working. The agreed questionnaire included a final "other" option, to allow those consulted to add generic competences that had not been included in the original list.

1. List of generic competences agreed for Russia

1. Ability for abstract thinking, analysis and synthesis.
2. Ability to work in a team.
3. Capacity to generate new ideas (creativity).
4. Ability to identify, pose and resolve problems.
5. Ability to design and manage projects.

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[1] Gonzalez, J. and Wagenaar, R. (2008), *Universities contribution to Bologna Process*. Bilbao: University of Deusto, 2008.

[2] Beneitone, P.; Esquetini, C.; Gonzalez, J.; Marty Maleta, M.; Siufi, G. and Wagenaar, R., eds. *Reflexiones y Perspectivas de la Educación Superior en América Latina. Informe Final-Proyecto Tuning-América Latina. 2004-2007*. Bilbao: University of Deusto, 2007.

6. Ability to apply knowledge in practical situations.
7. Ability to communicate in a second language.
8. Skills in the use of information and communications technologies.
9. Capacity to learn and stay up-to-date with learning.
10. Ability to communicate both orally and in written form in the native language.
11. Ability to work autonomously.
12. Ability to make reasoned decisions.
13. Ability for critical thinking.
14. Appreciation of and respect for diversity and multiculturality.
15. Ability to act with social responsibility and civic awareness.
16. Ability to act on the basis of ethical reasoning.
17. Commitment to the conservation of the environment.
18. Ability to communicate with non-experts of one's field.
19. Ability to plan and manage time.
20. Ability to evaluate and maintain the quality of work produced.
21. Ability to be critical and self-critical.
22. Ability to search for, process and analyse information from a variety of sources.
23. Commitment to safety.
24. Interpersonal and interaction skills.
25. Ability to undertake research at an appropriate level.
26. Knowledge and understanding of the subject area and understanding of the profession.
27. Ability to resolve conflicts and negotiate.
28. Ability to focus on quality.
29. Ability to focus on results.
30. Ability to innovate.

If we compare the lists drawn up in the European project, we can see that there is a high degree of similarity in the definition of the main generic competences. There are many convergent competences, which are easily comparable, identified in both projects. Besides the definition of generic competences, the Subject Area Group Coordinators agreed on, separately, the lists of Subject Specific Competences for their fields (Ecology, Economics and Management, Education, Environmental Engineering, Information and Communication Technologies, Languages, Law, Social Work, and Tourism). The consultation process was developed jointly for generic and subject specific competences.

2. Methodology for the consultation process

As in other Tuning projects, it was decided to use a system of cluster sampling, given that the people surveyed are grouped in the universities themselves. This decision was made because, given that the people surveyed are not strictly independent of each other, such sampling could not, in all probability be considered to be random.

Cluster designs are widely used in research[3] and do not represent a source of partiality. Cluster sampling can affect the error rate of sampling of the study of any calculation generated. The sampling error increases depending on the differences in the questions measured between conglomerates.

The design effect due to cluster sampling has to be calculated using an intra-class correlation. A high intra-class correlation indicates that differences among the conglomerates are high and, therefore, increases the sampling error in the research. It should be noted that a low inter-class correlation in any question, i.e close to zero, indicates that a simple random sample would have given similar results.

All the calculations and conclusions take into account the nature of data clusters, at university level, using multi-level models. This model was considered to be the most suitable, because it takes into account the structure of data clustering (e.g., it does not assume that the observations

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[3] Bryk, A.S. and Raudenbusch, S.W. (1992). *Hierarchical Linear Models: Applications and Data Analysis Methods.* Sage Publications.

Draper, D. (1995). "Inference and hierarchical modelling in the social sciences". *Journal of Education and Behavioral Statistics 20*, 115-147.

Goldstein, H. (1992). "Statistical information and the measurement of education outcomes (editorial)". *Journal of the Royal Statistical Society, A,* 155: 313-15.

Goldstein, H (1995). *Multilevel Statistical Models.* London, Edward Arnold: New York, Halstead Press.

Goldstein, H. and Spielgelhalter, D. (1996). "League tables and their limitations: Statistical issues in comparisons of institutional performance". *Journal of the Royal Statistical Society, Series A* 159, 385-443.

Goldstein, H.; Rasbash, J.; Yang, M.; Woodhouse, G.; Pan H. and Thomas, S. (1993). *A multilevel analysis of school examination results.* Oxford Review of Education, 19: 425-33.

are independent as they are in a random sample). These models have been extensively used in educational research since the segmented structure is nearly always present.

At the same time, multi-level models allow for simultaneous appreciation of individual differences and conglomerates, giving suitable calculations of typical errors and making any deduction at an individual and conglomerate level appropriate.

In this context, the conglomerates are not seen as a fixed number of categories of an explanatory variable (e.g., the list of the universities selected as a fixed number of categories), but rather it is considered that the selected conglomerate belongs to a totality of conglomerates. At the same time, it provides better calculations at an individual level for groups with a small number of observations.

With regard to the variables to be considered, it was decided to consult subjects on:

- the degree of **importance**: the relevance of the competence, in their opinion, for work in their profession,
- the level of **achievement**: the achievement of this competence as a result of having taken this university degree.

To evaluate these two variables, the interviewer had to use a scale: 1 = none; 2 = weak; 3 = moderate; 4 = strong.

- **ranking:** based on the categorisation of the five most important competences according to academics, graduates, students and employers, a new variable was created for each competence. The competence that was ranked highest in the survey was allocated five points, four for the second and so on, with one point for the last in the selection. If the competence was not chosen in the survey, it scored zero points.

Once the variables had been defined, agreements were reached on which and how many people to consult:

- ***Academics:*** *University lecturers teaching in any of the theme areas of the project. Each university was asked to gather information from at least* ***30 academics*** *in the area in which the university was participating.*
- ***Graduates:*** *people who had successfully completed a full study programme/university degree, in any of the areas of the project and had received the corresponding degree. Each participating university was asked to survey at least* ***30 graduates*** *from the area in which they were participating.*
- **Students**: people who are either studying in the last two years of a first degree in any of the project areas in the participating universities or still awaiting graduation despite having completed their studies. Each university was asked to sample a minimum of **30 students** from the subject area in which they were participating in the project.
- **Employers**: people and/or organisations who have employed graduates from the university, or people and/or organisations which, although there is no evidence that they have hired graduates from the university, appear to have jobs of interest for graduates. Each university was asked to obtain information from at least **30 employers** of graduates in the subject area represented by the university in the project.

The survey was conducted between May and July 2011, predominantly through an on-line system, resulting in a very significant number of answers: **more than 18,000 questionnaires** (including generic and subject specific) were returned.

3. Analysis of the results[4]

The data and results gleaned from the questionnaire allowed for three levels of analysis: general, by subject area, and by institution. The **general** analysis gives the results from the academics, graduates, students and employers throughout Russia. The analysis by **subject area** shows the opinions of these four groups, in relation to each discipline. Similarly, the results of the questionnaires by **institution** were sent to each institution, for the consideration and potential use of participating universities. This first part of the chapter focused on general analysis.

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[4] This chapter contains only a summary of all the Tuning Russia project work related to the questionnaire. All the tables and graphs, as well as PowerPoint presentations were available at Tuining Russia website: http://www.tuningrussia.org..

First, to introduce the general analysis of the results of the questionnaire, we present the totals gathered in Russia, divided up into the four groups considered:

Table 1
Number of questionnaires of Generic Competences
(by group of stakeholders)

Group	Number of questionnaires received
Academics	2,220
Graduates	2,414
Students	2,479
Employers	1,856
Total	8,869

The general analysis will be presented at two levels:

- Analysis by group.
- Analysis by variable.

The group analysis will present the results separately for each of the four groups (**academics**, **graduates**, **students** and **employers**), showing in each case what was considered to be most and least important and the way in which the group viewed the achievement of competences. It will also be analysed the differences between the degree of importance and the degree of achievement, in order to highlight any that need to be re-thought. At the same time, where relevant, a comparison will be made between the Russian and the European project, in terms of what each group in both regions considered to be most and least important.

At the second level, the axis of analysis will consists of the three variables (importance, achievement and ranking), which will make it possible to see comparatively, among the four groups, what the response was with regard to each of the variables, in order to highlight the degree of correlation between them.

3.1. Analysis by group

3.1.1. Academics

The following table refers to the means for each competence in the 1 to 4 scale. Each competence was rated in terms of *importance* and *achievement*, so there are two results for each competence. The 30 competences were ordered from the most important to least important competence from academic perspective. Of course the mean for *achievement* did not follow strictly a descending pattern, as the reference for this order is the mean for *importance*. The mean for *achievement* is normally lower than the mean for *importance*. The gap between both means is relevant as it shows how far both means are. A wide gap between two competences is more relevant if the competence is rated as a highly important competence.

Table 2
Importance and achievement of generic competences for ACADEMICS from Russia. Measures in decreasing order of importance

	Description	Importance	Achievement
6	Ability to apply knowledge in practical situations	3,76	3,00
26	Knowledge and understanding of the subject area and understanding of the profession	3,66	3,07
4	Ability to identify, pose and resolve problems	3,62	2,86
9	Capacity to learn and stay up-to-date with learning	3,62	2,83
8	Skills in the use of information and communications technologies	3,58	3,03
11	Ability to work autonomously	3,58	2,91
10	Ability to communicate both orally and in written form in the native language	3,57	2,96
22	Ability to search for, process and analyse information from a variety of sources	3,57	2,96
12	Ability to make reasoned decisions	3,56	2,82

	Description	Importance	Achievement
29	Ability to focus on results	3,56	2,95
28	Ability to focus on quality	3,52	2,82
1	Ability for abstract thinking, analysis and synthesis	3,49	2,85
19	Ability to plan and manage time	3,48	2,64
20	Ability to evaluate and maintain the quality of work produced	3,48	2,78
24	Interpersonal and interaction skills	3,48	2,92
3	Capacity to generate new ideas (creativity)	3,43	2,68
16	Ability to act on the basis of ethical reasoning	3,43	2,80
2	Ability to work in a team	3,41	2,85
27	Ability to resolve conflicts and negotiate	3,38	2,69
13	Ability for critical thinking	3,36	2,70
25	Ability to undertake research at an appropriate level	3,30	2,73
7	Ability to communicate in a second language	3,30	2,65
5	Ability to design and manage projects	3,29	2,61
15	Ability to act with social responsibility and civic awareness	3,28	2,68
30	Ability to innovate	3,28	2,63
23	Commitment to safety	3,28	2,65
21	Ability to be critical and self-critical	3,24	2,60
14	Appreciation of and respect for diversity and multiculturality	3,21	2,79
18	Ability to communicate with non-experts of one's field	3,11	2,61
17	Commitment to the conservation of the environment	3,04	2,44

Academics: All competences were scored over 3. However, they scored almost all competences (27) below 3 in terms of their achievement. *Ability to apply knowledge in practical situations, Knowledge and understanding of the subject area and understanding of the profession*, and *Skills in the use of information and communications technologies* are the only competences rated over 3 in terms of achievement. These three competences rated as the five most important were also considered within the five most achieved.

Table 2.1
The five most and least important competences, according to Russian ACADEMICS

Most important competences	Least important competences
Ability to apply knowledge in practical situations.	Commitment to the conservation of the environment.
Knowledge and understanding of the subject area and understanding of the profession.	Ability to communicate with non-experts of one's field.
Ability to identify, pose and resolve problems.	Appreciation of and respect for diversity and multiculturality.
Capacity to learn and stay up-to-date with learning.	Ability to be critical and self-critical.
Skills in the use of information and communications technologies.	Commitment to safety.

It is interesting to analyse the differences between the academics' relative scores for importance and achievement, in other words to spot the gap in each of the 30 competences between importance and achievement.

The competences with the least difference in the relative score for importance and achievement are: *Appreciation of and respect for diversity and multiculturality, Ability to communicate with non-experts of one's field, Skills in the use of information and communications technologies, Interpersonal and interaction skills* and *Ability to work in a team.* In particular, *Appreciation of and respect for diversity and multiculturality* and *Ability to communicate with non-experts of one's field*, which are the least important competence from Academic

perspective, show no gap between importance and achievement. This suggests that, despite not being considered important, they are perceived as being properly carried out. Including in this group of no significant gap between importance and achievement, there is a competence rated among the five most important: *Skills in the use of information and communications technologies*.

At the other extreme are the competences with the greatest difference between what was considered important and the rating given to its achievement. In this analysis, it is interesting to look at the gaps between the competences considered to be the most important, such as *Ability to identify, pose and resolve problems, Ability to apply knowledge in practical situations* and *Capacity to learn and stay up-to-date with learning*. In these cases, there is a significant difference between the average scores for importance and for achievement. It should bear this point in mind in later reflections in order to see where the academics see challenges to the education process.

Some of the generic competences agreed in Russia were reformulated and are defined using different expressions, though in most cases equivalent, to those presented in the Tuning Europe project. Furthermore, we made a comparative analysis in relation to the importance given to the generic competences by the different groups. In Tuning Europe (2008[5]), the academics considered the five most important competences to be: *Ability for abstract thinking, analysis and synthesis, Ability to apply knowledge in practical situations, Knowledge and understanding of the subject area and understanding of the profession, Ability to identify, pose and resolve problems* and *Capacity to learn and stay up-to-date with learning*. The least important competences were considered to be: *Ability to communicate with non-experts of one´s field, Commitment to the conservation of the environment, Spirit of enterprise, ability to take initiative, Commitment to safety* and *Ability to show awareness of equal opportunities and gender issues.*

Comparing both projects (Russia and Europe), we can see an overlap in four of the competences considered to be most important (*Ability to apply knowledge in practical situations, Knowledge and understanding of the subject area and understanding of the profession, Ability to identify,*

[5] The working documents with all the tables and graphs are available on Tuning Europe website (http://www.unideusto.org/tuningeu/)

pose and resolve problems and *Capacity to learn and stay up-to-date with learning*).

Analysing the similarities and differences between the competences that the Russian and European academics consider to be least important, we can see three coomon competences in the "bottom-five" lists: *Commitment to the conservation of the environment, Ability to communicate with non-experts of one's field* and *Commitment to safety.*

3.1.2. Graduates

Table 3
Importance and achievement of generic competences for GRADUATES from Russia. Measures in decreasing order of importance

	Description	Importance	Achievement
6	Ability to apply knowledge in practical situations	3,66	2,99
4	Ability to identify, pose and resolve problems	3,59	3,08
29	Ability to focus on results	3,59	3,18
12	Ability to make reasoned decisions	3,56	3,06
26	Knowledge and understanding of the subject area and understanding of the profession	3,56	3,17
28	Ability to focus on quality	3,53	3,06
11	Ability to work autonomously	3,53	3,24
19	Ability to plan and manage time	3,53	2,88
22	Ability to search for, process and analyse information from a variety of sources	3,52	3,26
8	Skills in the use of information and communications technologies	3,51	3,03
20	Ability to evaluate and maintain the quality of work produced	3,50	3,02

	Description	Importance	Achievement
10	Ability to communicate both orally and in written form in the native language	3,50	3,11
27	Ability to resolve conflicts and negotiate	3,45	2,82
9	Capacity to learn and stay up-to-date with learning	3,44	3,07
24	Interpersonal and interaction skills	3,44	3,05
2	Ability to work in a team	3,43	2,99
1	Ability for abstract thinking, analysis and synthesis	3,37	2,99
3	Capacity to generate new ideas (creativity)	3,36	2,78
5	Ability to design and manage projects	3,33	2,78
13	Ability for critical thinking	3,27	2,88
16	Ability to act on the basis of ethical reasoning	3,27	2,95
21	Ability to be critical and self-critical	3,26	2,93
23	Commitment to safety	3,25	2,83
7	Ability to communicate in a second language	3,22	2,70
30	Ability to innovate	3,20	2,67
18	Ability to communicate with non-experts of one's field	3,15	2,80
15	Ability to act with social responsibility and civic awareness	3,14	2,85
14	Appreciation of and respect for diversity and multiculturality	3,14	2,97
25	Ability to undertake research at an appropriate level	3,08	2,95
17	Commitment to the conservation of the environment	2,99	2,67

In the case of **graduates**, 29 generic competences scored over 3 on importance. If we analyse the level of achievement, we can see that 10 competences score over 3. Four competences rated as the five most important *(Ability to identify, pose and resolve problems, Ability to focus on results, Ability to make reasoned decisions* and *Knowledge and understanding of the subject area and understanding of the profession)* were also considered within the five most achieved.

Table 3.1
The five most and least important competences, according to Russian GRADUATES

Most important competences	Least important competences
Ability to apply knowledge in practical situations.	Commitment to the conservation of the environment.
Ability to identify, pose and resolve problems.	Ability to undertake research at an appropriate level.
Ability to focus on results.	Appreciation of and respect for diversity and multiculturality.
Ability to make reasoned decisions.	Ability to act with social responsibility and civic awareness.
Knowledge and understanding of the subject area and understanding of the profession.	Ability to communicate with non-experts of one's field.

In relation to the gap between the scores given by graduates for importance and achievement in each of the generic competences, we can identify that the competences that display the greatest difference between the scores for importance and achievement were: *Ability to apply knowledge in practical situations, Ability to plan and manage time, Ability to resolve conflicts and negotiate, Ability to design and manage projects* and *Capacity to generate new ideas (creativity)*. In particular, *Ability to apply knowledge in practical situations* is among the five generic competences considered to be most important by the graduates.

The competences with the least difference in the relative score for importance and achievement are: *Ability to undertake research*

at an appropriate level, Appreciation of and respect for diversity and multiculturality and *Ability to act with social responsibility and civic awareness.*These three competences which showed no significant gap between importance and achievement were also considered to be among the least important by the graduates. This would suggest that although they are not considered to be important, there is a perception that they have been achieved.

Focusing on the comparative analysis of the results from Russia and other regions, in the Tuning Europe project, the graduates considered the most important competences to be: *Ability for abstract thinking, analysis and synthesis, Ability to apply knowledge in practical situations, Knowledge and understanding of the subject area and understanding of the profession, Ability to identify, pose and resolve problems* and *Capacity to learn and stay up-to-date with learning*. The least important competences were considered to be: *Commitment to the conservation of the environment, Commitment to safety, Ability to show awareness of equal opportunities and gender issues*, *Appreciation of and respect for diversity and multiculturality* and *Ability to act with social responsibility and civic awareness.*

If we compare the scores given by Russian and European graduates, we see that they agree on three of the most important competences (*Ability to apply knowledge in practical situations*, *Ability to identify, pose and resolve problems,* and *Knowledge and understanding of the subject area and understanding of the profession*). Analysing the similarities and differences between the competences that the Russian and European graduates consider to be least important, and as in the case of academics, we can see that three competence appear in the "bottom-five" lists in both projects: *Commitment to the conservation of the environment, Appreciation of and respect for diversity and multiculturality* and *Ability to act with social responsibility and civic awareness.*

3.1.3. Students

Table 4
Importance and achievement of generic competences for STUDENTS from Russia. Measures in decreasing order of importance

	Description	Importance	Achievement
6	Ability to apply knowledge in practical situations	3,68	3,01
12	Ability to make reasoned decisions	3,59	3,09
4	Ability to identify, pose and resolve problems	3,57	3,04
26	Knowledge and understanding of the subject area and understanding of the profession	3,56	3,19
29	Ability to focus on results	3,56	3,17
28	Ability to focus on quality	3,54	3,07
10	Ability to communicate both orally and in written form in the native language	3,52	3,16
22	Ability to search for, process and analyse information from a variety of sources	3,52	3,20
11	Ability to work autonomously	3,50	3,20
8	Skills in the use of information and communications technologies	3,48	2,99
19	Ability to plan and manage time	3,48	2,85
20	Ability to evaluate and maintain the quality of work produced	3,47	3,01
24	Interpersonal and interaction skills	3,45	3,08
27	Ability to resolve conflicts and negotiate	3,44	2,85
2	Ability to work in a team	3,43	3,02
9	Capacity to learn and stay up-to-date with learning	3,42	3,09

	Description	Importance	Achievement
3	Capacity to generate new ideas (creativity)	3,42	2,80
1	Ability for abstract thinking, analysis and synthesis	3,33	2,90
5	Ability to design and manage projects	3,30	2,74
21	Ability to be critical and self-critical	3,28	2,88
16	Ability to act on the basis of ethical reasoning	3,26	2,99
23	Commitment to safety	3,26	2,85
30	Ability to innovate	3,26	2,75
7	Ability to communicate in a second language	3,25	2,73
13	Ability for critical thinking	3,22	2,85
25	Ability to undertake research at an appropriate level	3,22	2,88
14	Appreciation of and respect for diversity and multiculturality	3,14	2,90
15	Ability to act with social responsibility and civic awareness	3,14	2,87
18	Ability to communicate with non-experts of one's field	3,08	2,76
17	Commitment to the conservation of the environment	3,02	2,66

Students rated all competences over 3 in terms of importance. In terms of the level of achievement, 13 competences scored over 3. This is very significant because employers and academics rated less than 5 competences over 3 points.

Table 4.1
The five most and least important competences,
according to Russian STUDENTS

Most important competences	Least important competences
Ability to apply knowledge in practical situations.	Ability to communicate with non-experts of one's field.
Ability to make reasoned decisions.	Ability to act with social responsibility and civic awareness.
Ability to identify, pose and resolve problems.	Commitment to the conservation of the environment.
Knowledge and understanding of the subject area and understanding of the profession.	Appreciation of and respect for diversity and multiculturality.
Ability to focus on results.	Ability to undertake research at an appropriate level.

Analysing the gap between the scores given by Russian students to the importance and achievement of each of the generic competences, we underline that the greatest difference between what was considered important and the rating given to its achievement is*: Ability to apply knowledge in practical situations.*This is among the competences students considered to be most important yet they rated it low on level of achievement.

The competences with the least difference in the relative score for importance and achievement are: *Appreciation of and respect for diversity and multiculturality, Ability to act on the basis of ethical reasoning, Ability to act with social responsibility and civic awareness, Ability to work autonomously* and *Ability to search for, process and analyse information from a variety of sources.* These five competences, where there is no significant gap between importance and achievement, include two which were considered to be among the least important by students (*Appreciation of and respect for diversity and multiculturality* and *Ability to act with social responsibility and civic awareness,*). This would suggest that although they are not considered to be important there is a perception that they have been achieved.

For a comparative analysis between the different Tuning projects, European students consider the following competences to be the most important: *Ability to apply knowledge in practical situations, Ability for*

abstract thinking, analysis and synthesis, Ability to identify, pose and resolve problems, Knowledge and understanding of the subject area and understanding of the profession and *Ability to work in a team.* The least important competences were considered to be: *Ability to act with social responsibility and civic awareness, Commitment to the conservation of the environment, Ability to communicate with non-experts of one's field, Commitment to safety* and *Ability to show awareness of equal opportunities and gender issues.*

If we compare the scores given by Russian and European students, we see that they agree on three of the most important competences (*Ability to apply knowledge in practical situations*, *Ability to identify, pose and resolve problems,* and *Knowledge and understanding of the subject area and understanding of the profession*). As in the case of academics and graduates, Russian and European students ranked three common competences in the bottom-five: *Commitment to the conservation of the environment, Ability to act with social responsibility and civic awareness,* and *Ability to communicate with non-experts of one's field.*

3.1.4. Employers

Table 5
Importance and achievement of generic competences for EMPLOYERS from Russia. Measures in decreasing order of importance

#	Description	Importance	Achievement
6	Ability to apply knowledge in practical situations	3,70	2,98
29	Ability to focus on results	3,66	3,04
12	Ability to make reasoned decisions	3,64	2,92
28	Ability to focus on quality	3,63	2,90
4	Ability to identify, pose and resolve problems	3,63	2,85
20	Ability to evaluate and maintain the quality of work produced	3,63	2,90
26	Knowledge and understanding of the subject area and understanding of the profession	3,62	3,07
22	Ability to search for, process and analyse information from a variety of sources	3,58	3,02

#	Description	Importance	Achievement
2	Ability to work in a team	3,58	2,92
19	Ability to plan and manage time	3,58	2,79
11	Ability to work autonomously	3,55	2,94
10	Ability to communicate both orally and in written form in the native language	3,54	3,02
8	Skills in the use of information and communications technologies	3,53	3,07
9	Capacity to learn and stay up-to-date with learning	3,48	2,94
27	Ability to resolve conflicts and negotiate	3,48	2,75
24	Interpersonal and interaction skills	3,45	2,95
23	Commitment to safety	3,40	2,82
3	Capacity to generate new ideas (creativity)	3,35	2,72
16	Ability to act on the basis of ethical reasoning	3,35	2,91
1	Ability for abstract thinking, analysis and synthesis	3,35	2,81
13	Ability for critical thinking	3,30	2,70
5	Ability to design and manage projects	3,28	2,60
15	Ability to act with social responsibility and civic awareness	3,26	2,83
21	Ability to be critical and self-critical	3,23	2,66
18	Ability to communicate with non-experts of one's field	3,22	2,73
30	Ability to innovate	3,21	2,64
14	Appreciation of and respect for diversity and multiculturality	3,14	2,81
17	Commitment to the conservation of the environment	3,07	2,67
25	Ability to undertake research at an appropriate level	3,00	2,66
7	Ability to communicate in a second language	2,90	2,49

Employers scored 29 competences over 3 in terms of their importance. In terms of achievement, 5 competences scored over 3, one of them it was also considered one of the most important: *Ability to focus on results*.

Table 5.1
The five most and least important competences, according to Russian EMPLOYERS

Most important competences	Least important competences
Ability to apply knowledge in practical situations.	Ability to communicate in a second language.
Ability to focus on results.	Ability to undertake research at an appropriate level.
Ability to make reasoned decisions.	Commitment to the conservation of the environment.
Ability to focus on quality.	Appreciation of and respect for diversity and multiculturality.
Ability to identify, pose and resolve problems.	Ability to innovate.

If we look at the differences between the rating given to the importance and achievement of each competence, we note that the competences with the greatest difference in the relative score for importance and achievement are: *Ability to plan and manage time, Ability to identify, pose and resolve problems, Ability to resolve conflicts and negotiate, Ability to evaluate and maintain the quality of work produced* and *Ability to focus on quality*. One of these is among the competences employers considered to be most important yet they rated it low on level of achievement (*Ability to identify, pose and resolve problems*).

At the other extreme are the competences with the least difference between what was considered important and the rating given to its achievement: *Appreciation of and respect for diversity and multiculturality, Ability to undertake research at an appropriate level, Commitment to the conservation of the environment, Ability to communicate in a second language* and *Ability to act with social responsibility and civic awareness.*

These five competences, where there is no significant gap between importance and achievement, were considered to be among the least important by students. This would suggest that, although they are not considered to be important, there is a perception that they have been achieved.

In terms of global comparison, European employers consider the following competences to be the most important: *Ability to apply knowledge in practical situations, Ability for abstract thinking, analysis and synthesis, Ability to identify, pose and resolve problems, Knowledge and understanding of the subject area and understanding of the profession* and *Ability to work in a team.* The least important competences were considered to be: *Ability to act with social responsibility and civic awareness, Ability to work in an international context, Ability to show awareness of equal opportunities and gender issues, Commitment to the conservation of the environment* and *Appreciation of and respect for diversity and multiculturality.*

A high level of coincidence can be seen in only one of the five competences considered to be most important by Russian and European employers (*Ability to identify, pose and resolve problems).*

We find a similar level of overlap in competences considered least important by employers in both projects, where they coincide in two of the five competences: *Commitment to the conservation of the environment* and *Appreciation of and respect for diversity and multiculturality.*

3.2. Analysis by variable

3.2.1. Importance

In the area of "importance", it is significant that the majority of the 30 competences were rated above 3, on a scale in which 3 is equivalent to Moderate and 4 to Strong. This means that the 30 competences defined by the participants in the project received backing and/or confirmation from those consulted. They consider them to be the generic competences that should really be included in the definition of a university degree in Russia. At the same time, having qualitatively analysed the open question on other possible competences not included in the list of 30, the answers contained no alternatives that were sufficiently significant to be

incorporated into the list of 30. They only consisted of reformulations of the existing competences.

With regard to the competences considered most important by each of the 4 groups consulted, there was agreement on two competences:

- Ability to apply knowledge in practical situations.
- Ability to identify, pose and resolve problems.

The **graduates** also agreed with the **employers** and **students,** in including two competences among the five most important (*Ability to make reasoned decisions* and *Ability to focus on results*) while the **academics** rated this competence much lower. Among **academics, students and graduates,** *Knowledge and understanding of the subject area and understanding of the profession* scored highest while **employers** rated much lower.

At the other end of the scale the four groups agreed on two least important competences: *Appreciation of and respect for diversity and multiculturality* and *Commitment to the conservation of the environment.* The **graduates** also agreed with the **academics** and **students,** in including *Ability to communicate with non-experts of one's field* among the five least important. Among **students, employers and graduates,** *Ability to undertake research at an appropriate level* was rated as one of the five least competences in terms of importance.

It is included in the variable analysis a calculation of the correlations among the means given by the four groups. This correlation coefficient measures the sign and intensity of the relationship between the means of the four groups considered in each result: importance, achievement and ranking. This most used coefficient has a minimum value of –1 (maximum possible negative relationship) and a maximum value of +1 (maximum possible positive relationship). A zero would indicate the absence of relationship between the results of any pair of given groups. In this particular study in Russia all correlations are positive. A negative correlation would indicate that two given groups are behaving in an opposite manner. A correlation close to 1 for two groups shows that the means obtained for the set of competences behave in a very similar manner.

Table 6
Correlation matrix between averages,
based on the level of importance between the different groups

	Academics	Employers	Students	Graduates
Academics	1,0000			
Employers	0,8181	1,0000		
Students	0,9259	0,8793	1,0000	
Graduates	0,9159	0,9209	0,9735	1,0000

The values of the correlation coefficient for importance were high - over 0.81 in all cases. This means that there was a high degree of compatibility among the four groups in with regard to the level of importance given to the 30 competences, with slightly less compatibility between academics and employers, and a particularly high correlation between students and graduates. This high correlation between students and graduates (0,97) mean that when a competence is judged by *studentss* as very important, *graduates* have considered this competence as very important too (that does not imply that the means are equal in both groups, but both means will be high relatively in each group). In the same manner if a given competence is judged by *students* among the least important ones, *graduates* will consider this competence as a competence of least importance (once again that does not imply that the means are equal in both groups, but both means will be relatively low in each group).

Comparing the four groups in both projects (Russia and Europe) we identified a common competence for ALL on the top five in terms of importance: *Ability to identify, pose and resolve problems.*

3.2.2. Achievement

It is worthy of mention that in achievement, the majority of the 30 competences were rated between 2 and 3 on a scale in which 2 is equivalent to Weak and 3 to Moderate. In some cases, many competences were rated over 3 (in particular for gradautes and students, more tan 10 competences form the 30).

With regard to the competences considered highly achieved by each of the 4 groups consulted, there was agreement on three competences:

- Ability to search for, process and analyse information from a variety of sources.
- Ability to communicate both orally and in written form in the native language.
- Knowledge and understanding of the subject area and understanding of the profession.

The **graduates, students and employers** scored*Ability to focus on results* higher than **academics**. For their part, the **academics and employers** included it amongst the five most achieved competences *Skills in the use of information and communication technologies* and **students and graduates** rated it much lower.

At the end of the scale, the four groups scored *Ability to innóvate and Ability to design and manage projects* among the least achieved competences. For their part, the **academics, students and graduates** agreed on one competence which is the least achieved: *Commitment to the conservation of the environment.*

With regard to the achievement of competences, there is lower coincidence among the groups than with regard to the importance. This means that there was a high degree of compatibility among the four groups in with regard to the level of achievement given to the 30 competences, with slightly less compatibility between employers and graduates, and a particularly high correlation between students and graduates.

Table 7
Correlation matrix between the averages, based on the level of achievement between the different groups

	Academics	Employers	Students	Graduates
Academics	1,0000			
Employers	0,8381	1,0000		
Students	0,8773	0,8795	1,0000	
Graduates	0,8514	0,8300	0,9669	1,0000

It is interesting to note that as in the case of Tuning Europe, the level of achievement is lower in the four groups than the level of importance. The four groups agreed on one competence with the greatest gaps between achievement and importance:

- Ability to plan and manage time.

This competence was considered very important but the four groups scored it as the lowest achieved. The **graduates** also agreed with the **academics** and **students,** in including two competences with the biggest gap between importance and achievement: *Ability to apply knowledge in practical situations* and *Capacity to generate new ideas (creativity)*. Among **employers, students and graduates,** *Ability to resolve conflicts and negotiate* also showed one of the biggest gap. On the other hand, the four groups agreed on one competence with no gap between importance and achievement: *Appreciation of and respect for diversity and multiculturality.*

3.2.3. Ranking

The use of a third variable in analysing the information, has made it possible to verify the consistency of the information gathered and, therefore, the consistency of the conclusions set out in the paragraphs above. The table below compares the four groups, showing the ranking of the competences derived from analysis of this variable.

Table 8
Comparative ranking of generic competences by GROUP

Competence	Academics	Employers	Students	Graduates
Ability to apply knowledge in practical situations.	1	1	1	1
Ability to identify, pose and resolve problems.	2	2	2	2
Ability for abstract thinking, analysis and synthesis.	3	6	4	3

Competence	Academics	Employers	Students	Graduates
Knowledge and understanding of the subject area and understanding of the profession.	4	4	5	5
Ability to work in a team.	5	3	3	4
Capacity to learn and stay up-to-date with learning.	6	15	11	10
Capacity to generate new ideas (creativity).	7	10	7	7
Ability to make reasoned decisions.	8	7	8	9
Ability to communicate in a second language.	9	14	6	8
Ability to search for, process and analyse information from a variety of sources.	10	17	16	13
Ability to focus on results.	11	5	9	6
Ability to work autonomously.	12	9	12	15
Skills in the use of information and communications technologies.	13	11	15	16
Ability to focus on quality.	14	8	13	11
Ability to design and manage projects.	15	18	10	12
Ability to evaluate and maintain the quality of work produced.	16	12	17	17
Ability to innovate.	17	20	23	20
Interpersonal and interaction skills.	18	16	14	18
Ability to plan and manage time.	19	13	19	14
Ability to act with social responsibility and civic awareness.	20	23	27	26

Competence	Academics	Employers	Students	Graduates
Ability for critical thinking.	21	27	21	23
Ability to act on the basis of ethical reasoning.	22	24	20	28
Commitment to the conservation of the environment.	23	21	22	22
Ability to communicate both orally and in written form in the native language.	24	25	24	24
Ability to undertake research at an appropriate level.	25	29	25	27
Ability to resolve conflicts and negotiate.	26	19	18	19
Appreciation of and respect for diversity and multiculturality.	27	26	28	30
Commitment to safety.	28	22	29	21
Ability to be critical and self-critical.	29	30	26	25
Ability to communicate with non-experts of one's field.	30	28	30	29

If we examine the table above, we again see a high level of coincidence between the four groups consulted, both in terms of the competences they ranked to be very important an those they saw as least important. The four groups ranked on the top five four common competences:

- Ability to apply knowledge in practical situations.
- Ability to identify, pose and resolve problems.
- Knowledge and understanding of the subject area and understanding of the profession.
- Ability to work in a team.

At the bottom five of the ranking, the four groups agreed on two competences: *Appreciation of and respect for diversity and multiculturality* and *Ability to communicate with non-experts of one's field.*

In terms of correlation, there is great coincidence among the four groups as it was showed with regard to the importance. This means that there was a high degree of compatibility among the four groups with regard to the ranking given to the 30 competences, with slightly less compatibility between academics and employers, and a particularly high correlation between students and graduates.

Table 9
Correlation matrix between the averages, based on the ranking between the different groups.

	Academics	Employers	Students	Graduates
Academics	1,0000			
Employers	0,9145	1,0000		
Students	0,9519	0,9287	1,0000	
Graduates	0,9595	0,9466	0,9761	1,0000

It is interesting to note that in the case of Tuning Russia project, the correlation between the 4 groups consulted is very high. Another important issue is related to consistency: the results of the ranking were very closed to the rating given in terms of importance. If we compare the results of the rating and the ranking, the four groups agreed on two competences on the top: *Ability to apply knowledge in practical situations* and *Ability to identify, pose and resolve problems.*

3.3. Some reflections on the results of the survey of generic competences in Russia

The established procedure met with acceptance in Russia. More than 8,800 questionnaires focused on generic competences and 9,100 related to subject specific competences shows an interest generated among the different agents in the universities involved in the study.

There is evidence of high rates of correlation among the four groups consulted (academics, graduates, students and employers) with regard to the 30 competences, both in terms of importance, and the level of achievement. The correlation among the groups in Russia is higher than

Europe. This shows that the groups in Russia are closer in their perception of the importance of the competences than in Europe.

All groups considered the 30 competences established to be important, awarding the majority of them ratings of over 3, on a scale in which 3 is equivalent to Moderate. This validates the list agreed by Russian experts within the project.

Another important aspect of the consultation process in Russia is the comparability of the results with Tuning Europe project. It is clear that the four groups consulted inboth regions rated and ranked some common competences as essential for a degree. These comparative results give elements for a global discussion.

Lower scores were given for level of achievement, indicating a good level of criticism and demand among those surveyed. The mean for *achievement* is normally lower than the mean for *importance*. This is the case in all other previous Tuning projects (and most studies using this double scale of 'importance' and 'achievement' show similar results). But of course the gap between both means is relevant as it shows how far both means are. A wide gap between two competences is more relevant if the competence is rated as a highly important competence.

In most of the competences considered to be very important by the four groups, there are significant gaps when compared to the perceived level of achievement. It will be crucial in the future to review the areas this study have shown to be relevant for the different groups and, where nonetheless there is perceived to be a lack of achievement. Competences that scored least in terms of importance showed less difference when compared to achievement. The results presented in this chapter showed part of the analysis, mainly focused on the top and bottom of the importance, achievement and ranking. It will also important to analyse what happened in the middle of the scale, where the majority of the competences were located.

The consultation process is one of the main stages at Tuning methodology and the starting point for an institutional, subject area related, national and global reflection. Tuning Russia contributes significantly to this discussion.

B. Subject Specific competences: summary of the main findings in the 9 SAG´s

In addition to generic competences - which it is hoped will be developed in all study programmes - each degree also seeks to develop other competences that are more specific to the particular subject area. The nine subject areas in the Tuning Russia Project engaged in intense discussion in order to reach agreement on the competences for each area. Each group submitted a report on their investigations, which has been published separately in the form of Reference Points[6]. All groups followed more or less the same procedure, although differences in the individual disciplines meant that approaches to defining subject specific competences varied.

In the first phase, the members of the group exchanged information on the current situation in their institutions, the type of programmes currently available and prospects for the future. They also worked to create a map of their discipline in Russia. Some preliminary conclusions emerged. The way the discipline was defined was seen to be based to some extent on national concepts. In some cases, too, the role of related disciplines in the programmes differed from university to university.

A second phase then began, focusing on whether it was possible to define a "core curriculum". The term itself was the subject of much discussion, since it can mean very different things depending on the context and each discipline. The groups analysed differences and analogies in the existing systems and study programmes. As part of this phase, each of the study area groups prepared their own questionnaires, containing a list of suggested **subject specific competences** for the discipline, and decided whom they should survey. Altogether, **over 9,100 questionnaires were gathered,** for the 11 subject areas (SAG Economics and Management - area Economics and area Management, SAG Languages - area Foreign Languages and area Interpreting and Translation).

In the third phase, each of the groups analysed the results of the questionnaires. The discussions were well structured and were based on draft reports, prepared in advance. The groups identified the common, different and dynamic elements in their discipline areas and tried to find

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[6] Reference Points are non-prescriptive indicators and general recommendations that aim to support the design, delivery and articulation of degree programmes in related subject area.

a common framework for elements in which it was considered useful to have clear points of reference. They also looked at any differences and examined whether any divergences existed that might be made use of.

The general conclusion that may be drawn from the ten very different reports is that there had been a *strong desire* and *openness* among academics to exchange their points of view on subject specific competences in their specific area of knowledge while at the same time *a significant degree of common understanding can be seen among academics* with regard to the competences related to their areas.

In a very short period of time, the Tuning Russia project has managed to demonstrate that clear objectives in education can be met if the right forum is created. Such platforms opportunities are a critical factor in offering academics a space in which to exchange points of view, debate new challenges and to update shared, different and dynamic features. The most important conclusion that can be drawn is probably that only by relating knowledge and the subject specific competences of each subject area to the profiles of academic degrees and professional profiles can greater transparency and consistency be achieved. This has all been made possible by the important work of the academics who gave their time to the Tuning Russia.

Each group was given the general structure of the report and what follows is a synthesis. The full versions of the reports, as well as other documents linked to the areas, are available on the project website[7]. Each "Reference Points" begins with an introduction to the subject area, describes the map of the subject, analyses the results of the questionnaire, presents the subject specific competences of the area, the meta-profile agreed, gives some examples of teaching, learning and assessment of generic and subject specific competences, and ends with a conclusion and recommendations for the future.

In this chapter, there is a synthesis of the two main outcomes related to each subject area group: the subject specific competences agreed and the meta-profile which reflects the structure and the interrelation of competences that characterise a particular subject area. Meta-profiles are used for reference, to depict mental models and should demonstrate the variety of possible and existent degree profiles within a particular

[7] http://www.tuningrussia.org

subject area. Meta-profiles and meta-competences are determined by analysing stakeholder-consultation results through re-categorising the list of competences. Such re-categorisation can be done differently in different subject areas and should reflect the subject area unique characteristics.

4.1. Subject specific competences – Ecology[8]

Subject specific competences in Ecology allow the graduate to understand the degree of responsibility for and from the skills aimed at ensuring the environmental safety of all spheres of human activity and the environment: participate in laboratory and field studies in the sphere of ecology and environment, to process research material, participate in the design, implementation and review of activities for the protection of the environment; to be able to work with the documentation for the environmental impact assessment, to carry out an environmental audit to make recommendations aimed at preserving the environment and environmental management.

The Ecology Group identified a list of 18 subject specific competences:

1. Show a broad knowledge and understanding of the essential facts, concepts, processes, principles and theories of ecology.
2. Recognize the applications and responsibilities of ecology and its role in society.
3. Show adequate knowledge of other disciplines relevant to ecology.
4. Independently analyse environmental materials in the field and laboratory, be able to describe, document and report the results.
5. Effectively apply basic principles of the natural ansd social sciences to current issues of ecology
6. Understand and appropriately use the vocabularies relevant to issues of ecology.
7. Write and speak clearly about technical issues related to ecology.
8. Work collaboratively with other professionals in the discipline of the Mjor to address significant policy issues in ecology.
9. Choose and apply appropriate quantitative tools necessary to analyse significant issues related to ecology.

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[8] Dyukarev Ivan, Ryan Paul, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Ecology.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

10. Evaluate sources of technical information for credibility and relevance for addressing significant issues related to ecology.
11. Identify significant ethical issues in ecology and be able to address these issues with respect to regional needs.
12. Demonstrate comprehensive knowledge in at least one of the specialized areas of ecology.
13. Be able to define, determine and implement a strategy for solving an ecology problem.
14. Be able to communicate ecology issues with wider society.
15. Understand and be able to explain the broad concepts of ecological issues to students and other professionals.
16. Be able to understand the interactions of environmental processes and test the results of this research.
17. Produce a substantial reports or thesis including an executive summary.
18. Demonstrate the ability to perform independent, original, and ultimately publishable and applicable research in the field of ecology.

After the consultation of the subject specific competences, the process of meta-competences definition and meta-profile project diagram design includes the following stages:

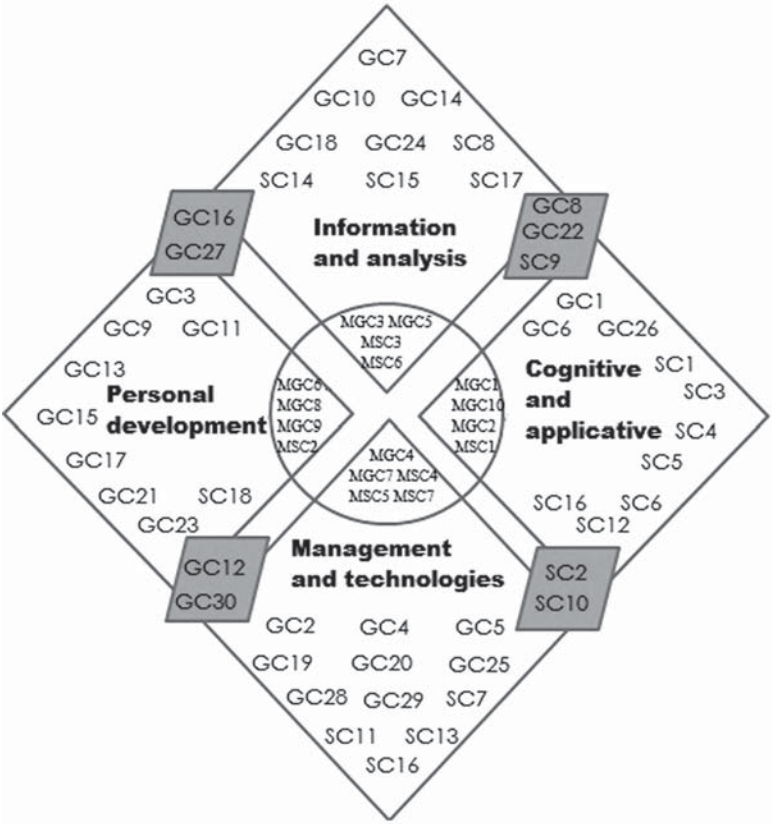
- Generic and subject specific competences ranking with respect to types of activity - primary «grouping» of the initial data. The group has formed clusters of competences and named them (set the «categories» of the data). At this stage, considering objects, tools and activities the following four clusters of competences were formulated: information analysis, cognitive and applicative, personal development, management and technologies.
- While forming each category, the group analysed the list of competences (generic and subject specific), referred to a certain cluster. Through discussions subject area group members determined which of the initial options should be:

  —joined to another, more clearly formulated
  —eliminated due to the ambiguity of the language
  —simplified, being previously too complicated
  —generalized, because they are too specific
  —separated, as they differ in content.

- Discussions resulted into the following meta-competences allocated to appropriate clusters:

Table 10
Meta-competences in Ecology

Information and analysis	Cognitive and applicative	Personal development	Management and technologies
MGC3 Ability to make reasoned decisions	MGC1 Ability to apply knowledge in practical situations	MGC6 Ability to work autonomously	MGC4 Ability to choose and implement proper methods for problem solving
MGC5 Ability to search for, process and analyse information	MGC2 Knowledge and understanding of the subject and understanding of the profession	MGC8 Ability to learn and stay up-to-date	MGC7 IT skills
MSC3 Ability to independently or in a team analyse environmental materials in the field and laboratory, be able to discuss, describe, document and report the results	MGC10 Ability to work in the international environment	MGC9 Commitment to responsibility	MSC5 Ability to evaluate sources of information for credibility and relevance for addressing significant issues related to ecology
MSC6 Ability to understand the interactions of environmental processes and test the results	MSC1 Broad knowledge and understanding of the essential facts, concepts, processes, principles and theories of ecology	MSC2 Ability to recognize the applications and responsibilities of ecology and its role in society	MSC7 Ability to perform independent, original and applicable research in the field of ecology
			MSC4 Ability to choose and apply appropriate tools and equipment



Graphic 1
Meta-Profile Diagram of Ecology

4.2. Subject specific competences – Economics and Management

4.2.1. Subject specific competences – Economics[9]

The initial list of subject specific competences was formulated taking into account the forms of professional activities and tasks which graduates

[9] Dyukarev Ivan, McCabe Patrick, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Economics.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

can undertake. Two separate lists of subject specific competences were designed for undergraduate and graduate programmes as most Russian higher education institutions offer two level programmes in the area of Economics. It was agreed that the questionnaire for graduates, employers, academics and students would include 14 competences for both levels of higher education. It is worth mentioning that the first four specific subject competences are the same for bachelors and for masters.

The list of subject specific competences for bachelor is:

1. The capacity to demonstrate consistent and coherent understanding of the principles of mirco- and macroeconomics.
2. The capacity for abstract thinking applied to complex economic systems.
3. The ability to explain the basics workings of an economic system and how economic agents make decisions.
4. The ability to keep up-to-date on contemporary economic issues and engage in continuous professional development.
5. The capacity to use clearly the language and terminology of economics.
6. The ability to articulate critical features and shortcomings in a model or method of analysis.
7. The ability to apply economic reasoning and methods effectively in solving general economic issues.
8. The ability to use economic reasoning to formulate and evaluate economic advice and policy.
9. The ability to source relevant data and apply quantitative methods effectively.
10. The ability to discuss effectively economic arguments with specialists and non-specialists.
11. The ability to apply proper economic indicators in project work.
12. The ability to be an active member of a research team.
13. The ability to teach economics in secondary schools and colleges.
14. The ability to evaluate the economic performance of an organization.

The list of subject specific competences for master is:

1. The capacity to demonstrate consistent and coherent understanding of the principles of mirco- and macroeconomics.

2. The capacity for abstract thinking applied to complex economic systems.
3. The ability to explain the basics workings of economic system and how economic agents make decisions.
4. The ability to keep up-to-date on contemporary economic issues and engage in continuous professional development.
5. The capacity to use clearly the language and terminology of economics, including, for example markets, finance, health, labour markets, environment, international trade, etc.
6. The ability to create one's own analytical models and apply them to various economic tasks
7. The ability to apply economic reasoning and methods effectively to the study of specific topic areas. For example markets, finance, health, labour markets, environment, international trade, etc.
8. The ability to suggest and promote recommendations for social and economic policy.
9. The ability to produce, source and use relevant data and apply quantitative methods effectively.
10. The ability to elaborate a personal opinion on professional issues and defend it during discussion with specialist and non-specialists.
11. The ability to define and apply relevant economic indicators in project management.
12. The ability to lead research teams.
13. The ability to teach economic disciplines in higher education institutions.
14. The ability to provide organizations with recommendations on the improvement of economic performance.

We can highlight two group of meta-competences generic and subject specific. When we are talking about generic meta-competences it is important to take into account the meta-competences of several subject areas. Within the framework of this project the common list of generic competences was formulated for all subject areas and levels of educational programmes.

The survey showed that the opinion of academics, employers, students and graduates was the same concerning four competences: ability for abstract thinking, analysis and synthesis, ability to identify, pose and resolve problems, ability to apply knowledge in practical situations, ability to work in teams. After the survey of respondents in the subject area of Economics another three competences were added to these four:

ability to work autonomously, ability to act with social responsibility and civic awareness, ability to focus on result and quality. The final list of generic meta-competences includes 7 positions. As a result only one competence was excluded from the list of generic competences the ability to develop and manage projects. All other competences were included as the components, which can explain the content of meta-competences. After the comparative analysis of the initial and final lists of competence the following table was drawn up.

Table 11
Generic Meta-Competences
(from the perspective of Economics)

	Meta-competence	Generic Competences (GC)
1.	Ability for abstract thinking, analysis and synthesis	Capacity to generate new ideas (Creativity) (GC3)
		Ability for critical thinking (GC13)
		Ability to be critical and self-critical (GC21)
		Ability to undertake research at an appropriate level (GC25)
2.	Ability to work in teams	Interpersonal and interactional skills (GC24)
		Ability to communicate in a second language (GC7)
		Skills in the use of information and communication technologies (GC8)
		Ability to communicate both orally and in written form in the native language (GC10)
		Ability to communicate with non-experts of one's field (GC18)
		Appreciation of and respect for diversity and multiculturalism (GC14)
3.	Ability to identify, pose and resolve problems	Ability to make reasoned decisions (GC12)
		Ability to search for, process and analyse information from a variety of sources (GC22)

	Meta-competence	Generic Competences (GC)
4.	Ability to apply knowledge in practical situations	Ability to communicate in a second language (GC7)
		Knowledge and understanding of the subject area and understanding of the profession (GC26)
5.	Ability to work autonomously	Capacity to learn and stay up-to-date with learning (GC9)
		Ability to plan and manage time (GC19)
6.	Ability to act with social responsibility and civic awareness	Ability to act on the basis of ethical reasoning (GC16)
		Commitment to the conservation of the environment (GC17)
		Appreciation of and respect for diversity and multiculturalism (GC14)
		Commitment to safety (GC23)
7.	Ability to focus on result and quality	Ability to focus on quality (GC28)
8.		Competence GC5 was excluded

As a result of consultations with Russian colleagues and European experts this list was enlarged by the five competences. As a result 9 meta-competences were included in the list below.

Table 12
Subject specific meta-competences (Bachelors)

Competence code	Meta-competence	Subject Specific Competence
MSCB 1	The capacity to demonstrate consistent and coherent understanding of the principles of mirco- and macroeconomics	The ability to source relevant data and apply quantitative methods effectively
		The ability to evaluate economic performance of an organization

Competence code	Meta-competence	Subject Specific Competence
MSCB 2	The capacity for abstract thinking applied to complex economic systems	
MSCB 3	The capacity to use clearly language and terminology of economics	
MSCB 4	The ability to articulate critical features and shortcomings in a model or method of analysis	The ability to apply economic reasoning and methods effectively in solving general economic issues
MSCB 5	The ability to apply proper economic indicators in project work	The ability to use economic reasoning to formulate and evaluate economic advice and policy
MSCB 6	The ability to discuss effectively economic arguments with specialists and non-specialists	The ability to explain the basic workings of economic system and how economic agents make decisions
MSCB 7	The ability to be an active member of a research team	
MSCB 8	The ability to keep up-to-date on contemporary economic issues and engage in continuous professional development	
MSCB 9	The ability to teach economics in secondary schoosl and colleges	

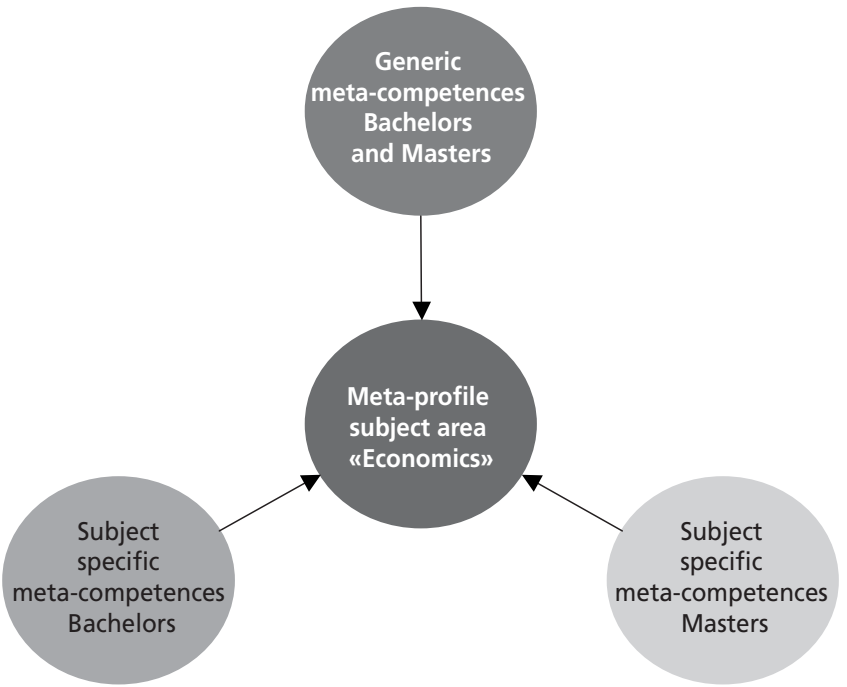
As a result of consultations with Russian colleagues and European experts this list was enlarged by the five competences. As a result seven meta-competences were included into the final list. The remaining seven competences were included as a part of four meta-competences as it was made with generic meta-competences.

Table 13
Subject specific meta-competences (Masters)

Competence code	Meta-competence	Subject Specific Competence
MSCM 1	The capacity to demonstrate consistent and coherent understanding of the principles of mirco- and macroeconomics	The ability to suggest and promote recommendations for social and economic policy
		The ability to provide organizations with recommendations on economic performance improvement
MSCM 2	The capacity for abstract thinking applied to complex economic systems	
MSCM 3	The ability to keep up-to-date on contemporary economic issues and engage in continuous professional development	
MSCM 4	The ability to create own analytical models and apply them to various economic tasks	The ability to apply economic reasoning and methods effectively to the study of specific topic areas. For example markets, finance, health, labour markets, environment, international trade, etc
		The ability to produce, source and use relevant data and apply quantitative methods effectively
		The ability to define and apply relevant economic indicators in project management
MSCM 5	The ability to elaborate a personal opinion on professional issues and defend it during discussion with specialist and non-specialists	The ability to explain the basic workings of economic system and how economic agents make decisions
		The capacity to clearly use language and terminology of economics, including, for example markets, finance, health, labour markets, environment, international trade, etc.

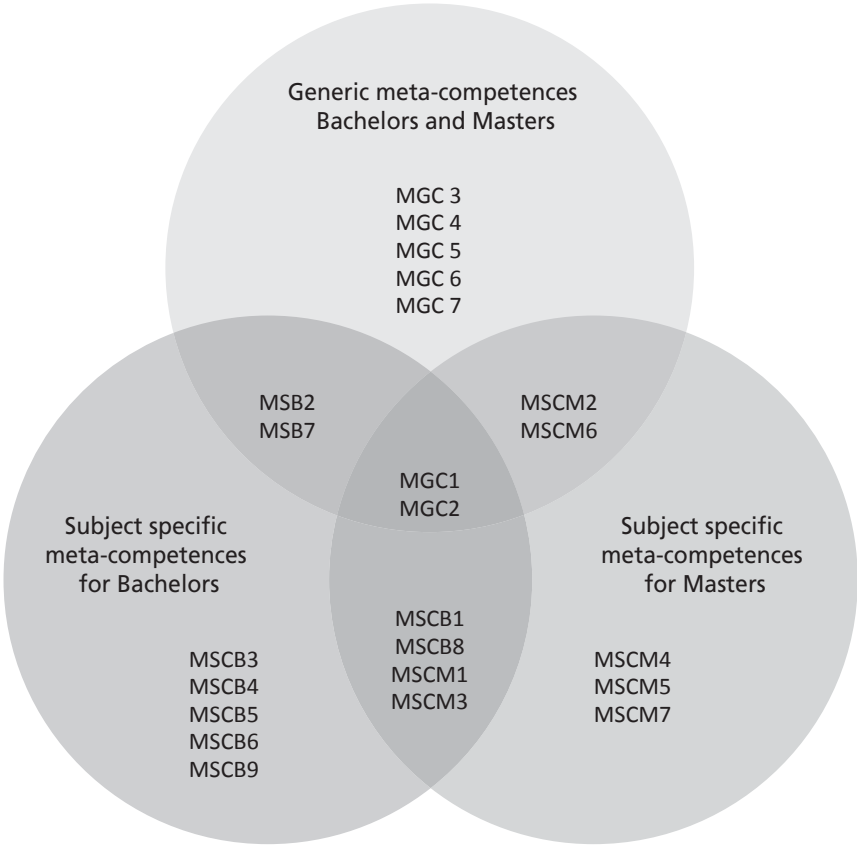
Competence code	Meta-competence	Subject Specific Competence
MSCM 6	The ability to lead research teams	
MSCM 7	The ability to teach economic disciplines in higher education institutions	

The structure of meta-profile in the subject area of Economics can be visualized as the aggregate of generic meta-profiles and subject specific mega profiles of bachelors and masters.



Graphic 2
Meta-profile in Economis (general version)

However there are intersections in the lists shown above of meta-competences, so it seems logical to illustrate the meta-profile of subject area Economics as follows.



Graphic 3
Diagram of meta-profile in Economics (in details)

4.2.2. Subject specific competences – Management[10]

The following competences have been noted by experts as important as regulatory requirements for graduates of Bachelor and Master Degrees in "Management" by performance of activities in the following functional areas: self-organization, to provide guidance, support change and innovation, human resources, management of resources, achievement of results.

1. Capacity to use the appropriate instruments for business environment analysis (i.e. industry analysis, market analysis, PESTL).
2. Capaicity to define criteria according to which an enterprise is defined and link the results with the analysis of the environment to identify perspectives (i.e. SWOT, internal and external value chain).
3. Capacity to Identify and analyse the impact of macro- and micro economic elements on business organisations (i.e. financial and monetary systems, internal markets).
4. Identify the functional areas of an organisation and their relations (i.e. purchasing, production, logistics, marketing, finance, human resource).
5. Capacity to Identify and analyse the constitutional characteristics of an organisation (i.e. goals and objectives, ownership, size, structure).
6. Ability to read, understand and analyse financial reports within field of work.
7. Capacity to provide company and projects with strategy recommendations using relevant tools.
8. Ability to manage resources according to objectives and actions planned.
9. Ability to use appropriate project management tools in decision making.
10. Ability to provide value chain with supply chain sustainable processes support.
11. Ability to consciously choose how to respond to any situation.
12. Capacity to identify, investigate and use actual «web» ICT tools.

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[10] Dyukarev Ivan, McCabe Patrick, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Management*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

13. Ability to teach management disciplines and develop educational programmes and training materials for them.

Following the analysis of the main types of tasks and professional activities of graduates and by grouping some competence of the lists (the survey) following key competences of managers could be suggested:

1. Team leadership.
2. Analysis of internal and external business environment.
3. Decision making.
4. Strategic planning.
5. Management of projects and processes.

Key competences	Generic (GC) and subject specific competences (SSC)
1. Team leadership	GC Ability to work in a team
	GC Capacity to learn and stay up-to-date with learning
2. Analysis of internal and external business environment	SSC Capacity to Identify and analyse the impact of macro- and micro economic elements on business organisations (i.e. financial and monetary systems, internal markets)
	SSC Capacity to Identify and analyse the constitutional characteristics of an organisation (i.e. goals and objectives, ownership, size, structure)
	SSC Capacity to use the respective instruments for business environment analysis (i.e. industry analysis, market analysis, PESTL)
	SSC Capacity to define criteria according to which an enterprise is defined and link the results with the analysis of the environment to identify perspectives (i.e. SWOT, internal and external value chain)
3. Decision making	SSC Ability to use appropriate project management tools in decision
	GC Ability to choose consciously how to respond to any situation
	GC Ability to make reasoned decisions
	GC Ability to search for, process and analyse information from a variety of sources

Key competences	Generic (GC) and subject specific competences (SSC)
4. Strategic planning	GC Ability to identify, pose and resolve problems
	GC Ability to plan and manage time
	GC Ability to apply knowledge in practical situations
	SSC Capacity to provide company and projects with strategy recommendations using relevant tools
	SSC Ability to manage resources according to objectives and actions planned
5. Management of projects and processes	GC Ability to focus on results
	SSC Capacity to identify, investigate and use actual "web" ICT tools
	SSC Ability to read, understand and analyse financial reports within field of work
	SSC Ability to provide value chain with supply chain sustainable processes support
	GC Knowledge and understanding of the subject area and understanding of the profession
	SSC Identify the functional areas of an organisation and their relations (i.e. purchasing, production, logistics, marketing, finance, human resource)

4.3. Subject specific competences - Education[11]

Creating a list of competencies in the subject area *Education* involves the following steps:

- Stage 1: *Finding University partners* who train students in Education (This consortium consists of 6 Universities).

[11] Dyukarev Ivan, Gilpin Arlene, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Education*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

- Stage 2: *Analysis of standards*, educational programmes and all possible job descriptions of psychologist, teacher, kindergartener, social-care teacher and other professions which can be found in Education.
- Stage 3: *Writing a long list of competences* for the subject area group of Education. The list consisted of 44 competences.
- Stage 4: *Classifying competences* according to the types of professional activity (didactic, correctional, communicative, organizational etc.).
- Stage 5: *Reducing the list of competences*. By means of comparative analysis we collected a long list of competences which were discussed by the members of the subject area group "Education". The discussion helped to reduce the number of competences down to 15:

1. Ability to diagnose and evaluate the level of development, achievement and educational needs of the individual.
2. Ability to reflect on the results of one's own work.
3. Ability to appreciate the social values of the profession and to keep ethical professional principles.
4. Ability to design and implement a learning process taking into consideation the social context and the learners' development.
5. Ability to be involved in collaborative work and interpersonal communication in educational contexts.
6. Ability to create and keep psychologically safe learning environments.
7. Ability to create psychological and educational conditions for self-development and self-realization within educational environments.
8. Ability to realize professional activities in diverse social institutions.
9. Ability to share educational knowledge and experience with others.
10. Ability to know, and to keep up to date with, the main international and national acts and documents.
11. Ability to assist in developing positive attitudes towards themselves and the social environment in learners and teachers.
12. Ability to understand and apply educational theories and methodology as a basis for general and specific teaching and learning activities.
13. Ability to undertake appropriate educational research in different contexts.
14. Ability to make use of e-learning and to integrate it into the learning environment.
15. Ability to speak clearly at an appropriate level in educational contexts.

After the consultation process and the analysis of the results, the Education group worked on the meta-profile. For the group, the core content of the meta-profile was determined by:

- features of the professional activity in the subject area *Education* (social responsibility, humanity, communication, creativity, improvisation, activity);
- the needs of society and the labour market (educational and professional standards, a survey of employers and other stakeholders);
- trends in Education (humanization, democratization, computerization of education, competence approach, life-long-learning, internationalization).

Table 14
List of meta-competences in Education

Generic competences	
GC 1	Ability to work in a team
GC 2	Capacity to generate new ideas (creativity)
GC 3	Ability to identify, pose and resolve problems
GC 4	Ability to apply knowledge in practical situations
GC 5	Capacity to learn and stay up to date with learning
GC 6	Ability to communicate both orally and in written form in the native and foreign language
GC 7	Ability to work autonomously
GC 8	Ability to act on the basis of ethical reasoning
GC 9	Ability to search for, process, analyze and use information from a variety of sources
GC 10	Knowledge and understanding of the subject area and understanding of the profession
GC 11	Ability to resolve conflicts and negotiate
GC 12	Ability to focus on quality

Subject competences	
SSC 1	Ability to diagnose and evaluate the level of development, achievement and educational needs of the individual.
SSC 2	Ability to reflect on the results of one's own work.
SSC 3	Ability to design and implement a learning process considering the social context and the learners' development.
SSC 4	Ability to be involved in collaborative work and interpersonal communication in educational contexts.
SSC 5	Ability to create and keep psychologically safe learning environments.
SSC 6	Ability to assist in developing positive attitudes towards themselves and the social environment in learners and teachers.
SSC 7	Ability to understand and apply educational theories and methodology as a basis for general and specific teaching and learning activities.
SSC 8	Skills in the use of information and communication technologies

In considering the meta competences for Education, the group used the report to UNESCO of the International Commission on Education for the Twenty-first Century report, *Education: The Necessary Utopia* (Jacques Delors, Paris 1996). Four basic categories for the principles of Education were outlined in this report.

The foundations of education: *learning to live together*, by developing an understanding of others and their history, traditions and spiritual values and, on this basis, would induce people to implement common projects or to manage the inevitable conflicts in an intelligent and peaceful way.

The one of these is *learning to know*. Given the rapid changes brought about by scientific progress and the new forms of economic and social activity, the emphasis has to be on combining a sufficiently broad general education with the possibility of in-depth work on a selected number of subjects.

Learning to do is another pillar. In addition to learning to do a job of work, it should, more generally, entail the acquisition of a competence that

Table 15
Competence groups (GC - generic; SSC - subject specific)

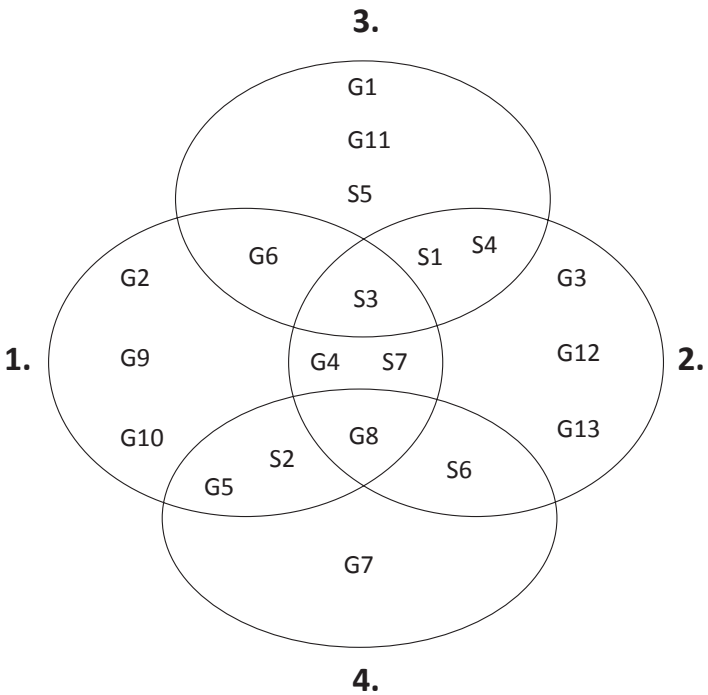
Ability to learn		Ability to work		Ability to be in harmony with others		Ability to be in harmony with oneself	
Cognitive competences/		Metodological competences		Communication/		Self - competences	
GC 2	Capacity to generate new ideas (creativity)	GC 3	Ability to identify, pose and resolve problems	GC 1	Ability to work in a team	GC 5	Capacity to learn and stay up-to-date with learning
GC 9	Ability to search for, process, analyse and use information from a variety of sources	GC 4	Ability to apply knowledge in practical situations	GC 6	Ability to communicate both orally and in written form in the native and foreign language	GC 7	Ability to work autonomously
GC 10	Knowledge and understanding of the subject area and understanding of the profession	GC 12	Ability to focus on quality	GC 11	Ability to resolve conflicts and negotiate	GC 8	Ability to act on the basis of ethical reasoning
		GC 13	Skills in the use of information and communication technologies	SSC 5	Ability to create and keep psychologically safe learning environments.	SSC 2	Ability to reflect on the results of one's own work.

Ability to learn		Ability to work		Ability to be in harmony with others		Ability to be in harmony with oneself	
Cognitive competences/		Metodological competences		Communication/		Self - competences	
		SSC 1	Ability to diagnose and evaluate the level of development, achievement and educational needs of the individual			SSC 6	Ability to assist in developing positive attitudes towards themselves and the social environment in learners and teachers.
		SSC 3	Ability to design and implement a learning process considering the social context and the learners' development				
		SSC 4	Ability to be involved in collaborative work and interpersonal communication in educational contexts				
		SSC 7	Ability to understand and apply educational theories and methodology as a basis for general and specific teaching and learning activities				

enables people to deal with a variety of situations, often unforeseeable, and to work in teams, a feature to which educational methods do not at present pay enough attention.

Last, but far from least, is the fourth pillar: *learning to be*. In the twenty-first century everyone will need to exercise greater independence and judgement combined with a stronger sense of personal responsibility for the attainment of common goals.

Then the Education group applied these meta-competences to the competences developed through the consultation.



Graphic 5
Meta-Profile Diagram for Education

1. Ability to learn.
2. Ability to work.
3. Ability to be harmony with others.
4. Ability to be harmony with oneself.

Consequently, the core competences of professional training in Education are GC 8, GC 4, SSC 3, SSC 7. The vector of professional training in Education is to be preferably directed towards interpersonal and methodological competences.

4.4. Subject specific competences - Environmental Engineering[12]

The Subject-specific competences for Environmental Engeneering consist of 25 items, the first 13 of which correspond to the general engineering competences, which any engineer should have coming out of high school, regardless of the direction of specialization, and numbers 14 to 25 are items related to the subject-specific competences for the area of environmental engineering.

The List of *Subject specific competences for Environmental Engeneering is:*

1. Ability to apprehend, accumulate, analyse and use fundamental and applied knowledge in technical, engineering and natural sciences, using modern information technologies.
2. Ability to participate in theoretical and experimental research using mathematical computation and modelling methods, technical devices, controlling and measuring apparatus, etc.
3. Knowledge and understanding of the role and status of engineering as a profession in the social-economic development of the society and impact of engineering solution in a global context.
4. Possessing of methods of visualization of technical objects by graphical representation and 3D geometric simulation, using computer technologies.
5. Ability to participate in creating, implementing, and using technical objects and technologies through all stages of their life cycle.
6. Ability to detect an engineering problem and to select a typical or nonstandard method of solution.
7. Ability to use existing and develop new technical methods, technologies and equipment for the solution of engineering problems.

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[12] Dyukarev Ivan, Manoliu Iacint, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Environmental Engineering.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

8. Ability to design and conduct experiments, as well as to analyse and to interpret data.
9. Ability to receive profound knowledge in one or more areas of engineering. Aptitude for life-long learning and professional skills improvement.
10. Knowledge of methods of the preservation and reproduction of basic technical systems and technologies.
11. Possessing of knowledge in interdisciplinary areas.
12. Ability to examine technical objects and technologies.
13. Ability to think strategically, identify, model and construct original engineering systems, elaborate unique and advanced technologies.
14. Ability to understand mechanism of anthropogenic influence on biosphere – *be able to understand the biosphere processes and influence of human being and technical and engineering systems on them.*
15. Ability to formulate and defend a position in ecological discussion – *be able to understand the various points of view, to formulate one's own point of view and to maintain that position in discussion on environment protection.*
16. Ability to understand the interrelation of scientific and technical progress and environmental protection – *be able to understand trends in techniques and technological development, scientific and technical process as a whole and its influence on the environment.*
17. Ability to apply principles of rational nature management – *be able to apply knowledge of the basic regularities of the functioning of the biosphere and principles of rational nature management for solving the problems in the field of environmental engineering.*
18. Ability to measure environmental parameters – *apply basic technical equipment and equipment used for environmental monitoring.*
19. Ability to predict a state of environment – *be able to analyse physical, chemical and biological anthropogenic impact on the environment and to predict its consequences.*
20. Ability to apply the requirements and norms of ecological legislation – *be able to apply requirements and norms of the ecological legislation and ecological standards in practice.*
21. Ability to identify and solve problems of environmental protection – *be able to understand, analyse and solve problems of environment protection from anthropogenic impact.*
22. Ability to carry out the techno-ecological analysis – *be able to carry out the techno-ecological analysis of economical activities and technical documentation.*

23. Ability to apply principles of ecological safety – *be able to apply main principles of ecological safety for protection of industrial personnel and the population at large from the possible consequences of failures and accidents.*
24. Ability to formulate problems of ecological design – *be able to formulate tasks for the survey and design works in accordance with requirements of environmental protection and rational nature management.*
25. Ability to understand the impact of technical solutions in a global environmental context.

Due to the large number of general and subject-specific competences that need to be implemented in the subject area, it is useful to carry out the procedure of re-categorization. It is possible to identify the key competences that at a certain level should be achieved by any graduate of a Bachelor's degree in a given subject area, regardless of the profile (orientation) training, or group competences into larger structures - the meta-–competences, denoting their specific terms. The achievement of key skills (meta-competences) should be an input requirement for applicants to master's programmes in a given subject area.

From meta-competences a meta-profile can be generated - a general understanding of a subject area, enabling its general identification and, at the same time, leaving the freedom to develop and implement educational programmes in specific areas of training and specialization in different universities.

Individual sets of meta-competences can have different contents, but they give the tools to compare the contents of a bachelor's in one subject area and provide learners with academic mobility.

A meta-profile is part of a consensus, it is a combination of general and specific competences with the general and specific competences being in interaction.

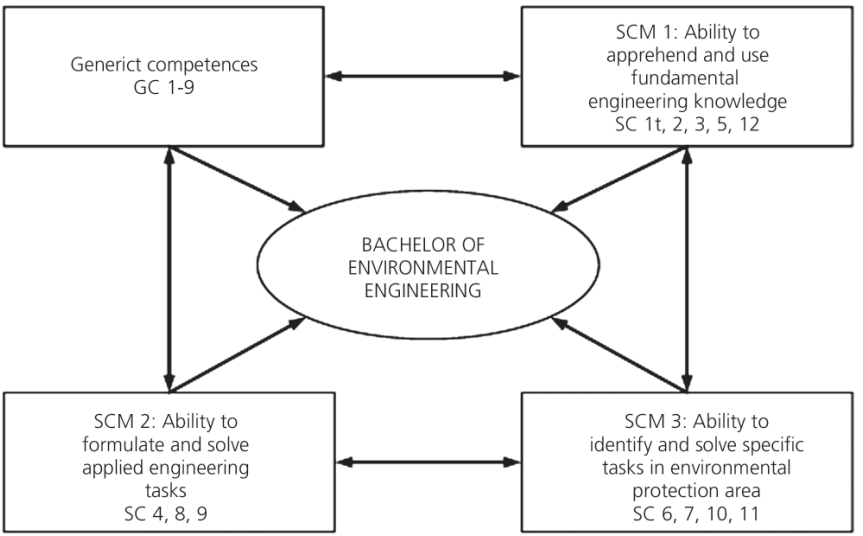
An analysis of the list, after the reduction of general and subject-specific competences in the subject group Environmental Engineering, has shown the feasibility of formulating four enlarged meta-competences at bachelor's level. One of them, GCM 1, includes all 9 general competences, which enable graduates to work at a high level in any production team and in any capacity, and to interact with specialists in other subject areas. Three

meta-competences are made up of subject-specific competences on the basis of their reference to different levels of engineering education: basic, applied and specialized in a specific area:

- SCM 1 - The ability to generate and use basic engineering knowledge (including competence SSC 1 - The ability to receive, collect, analyse and use basic and applied knowledge in the field of technical, engineering and science, including the use of modern information technology; SSC 2 - Ability to take part in the theoretical and experimental studies using mathematical calculations and modelling methods, technical equipment, test equipment, etc.; SSC 3 - Own the technical methods of imaging objects using graphic images and three-dimensional geometric modeling, including the use of computer technology ; SSC 5 - The ability to identify engineering problems and pick up the typical or standard solution; SSC 12 - The ability to understand the impact of the adopted technical solutions for global environmental context-
- SCM 2 - Ability to identify and solve an applied engineering problem (competences SSC 4 - The ability to participate in the creation, implementation and operation of the technical facilities and technologies at all stages of their life cycle; SSC 8 - The ability to measure environmental parameters; SC 9 - The ability to apply the requirements and standards of environmental laws)-
- SCM 3: The ability to identify and solve specific problems in the field of environmental protection (competence SSC 6 - Ability to understand the mechanism of human impacts on the biosphere; SSC 7 - The ability to apply the principles of environmental management; SSC 10 - The ability to understand and solve environmental problems; SSC 11 - The ability to conduct technical and environmental analysis).

This approach to the re-categorization of general and subject-specific competences demonstrates that, in the subject area of Environmental Engineering, there is no predominant influence of any one set of skills or meta-competences. They all complement each other and together can provide comprehensive training for students, a high level of graduates, and assure their compliance with modern requirements for specialists with higher education and with labour market needs.

The first meta-competence is composed of subject-specific competences related to the fundamental, basic engineering training, regardless of further specialization, which are presented in the table below.



Graphic 6
Diagram meta-profile in Environmental Engineering

4.5. Subject specific competences – Information and Communication Technologies[13]

The list of 16 synthesized professional competences which is presented below, is the result of a comparative analysis of professional competences, regrouping connected competences, a comparative analysis of educational degrees being implemented in Russian universities with international professional educational standards in the CT area called Computing Curricula:

1. To analyze subject area, identify, classify and describe problems; find the methods and approaches for solving them; define requirements.
2. To design ICT systems, including modelling (formal description) of structure and processes.

[13] Dyukarev Ivan, Rayon Alex, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Information and Communication Technologies.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

3. To develop and implement ICT systems.
4. To deploy, install, integrate, put into service and maintain ICT systems and their elements.
5. To guarantee the quality of information systems according to the requirements.
6. To develop and bring into effect new competitive ideas in the area of ICT.
7. To know, follow and assess the degree of compliance with industry specifications, standards, regulations, and recommendations.
8. To analyze, choose and apply methods and aids to provide information security.
9. To manage economic, human, technological and other resources efficiently.
10. To train ICT users and provide them with technical support.
11. To apply and develop fundamental and multidisciplinary knowledge, including mathematical and scientific principles, quantitative methods, tools (including software relevant to their engineering discipline) and notations for successful problem solving.
12. To prepare technical and methodical materials for presenting ICT system in every stages of the life cycle of information systems.
13. To know and apply core ICT theoretical and practical knowledge, principles and tools.
14. To appreciate the social considerations and ethical issues affecting the professional practice.
15. To estimate and appreciate economic and commercial issues affecting the professional practice.
16. To collect, process and systematize professional knowledge in information technology and appreciate the importance of life-long learning (continuing education, retraining, and self-learning) for the necessary adaptation to the evolution of the profession and society.

The list of key competences was analyzed in order to identify "clusters" of competences, i.e. meta-competences which consist of interconnected competences. Meta-competences form the core of educational programmes in the ICT area.

The following approach was chosen. The key competences were analysed one by one. Each competence was put into the cluster of competences with which it was the most closely connected, or, if no such cluster, a new cluster was created for this competence. By applying this procedure, the following five groups of competences were formed:

- MGC 1 Ability to perceive, analyze and synthesize information.
- MGC 2 Ability for self-development and self-improvement.
- MGC 3 Ability to join the professional community.
- MSSC 1 Ability to understand, apply and develop mathematical knowledge, basic laws of natural science, knowledge in problem domain (related to professional activity) and fundamentals of information technologies.
- MSSC 2 Ability to design, develop, implement and manage life cycle processes of information systems and technologies.

The non-key competences were also distributed between these five clusters. The content of the meta-competences is presented in the table below.

Table 16
Meta-competences for ICT area

Key competences	Other competences
MGC 1 Ability to perceive, analyze and synthesize information	
GC 7 Ability to communicate in a second language. GC 10 Ability to communicate both orally and in written form in the native language. GC 22 Ability to search for, process and analyse information from a variety of sources. GC 1 Ability for abstract thinking, analysis and synthesis.	GC 4 Ability to identify, pose and resolve problems. GC 12 Ability to make reasoned decisions. GC 13 Ability for critical thinking.
MGC 2 Ability for self-development and self-improvement	

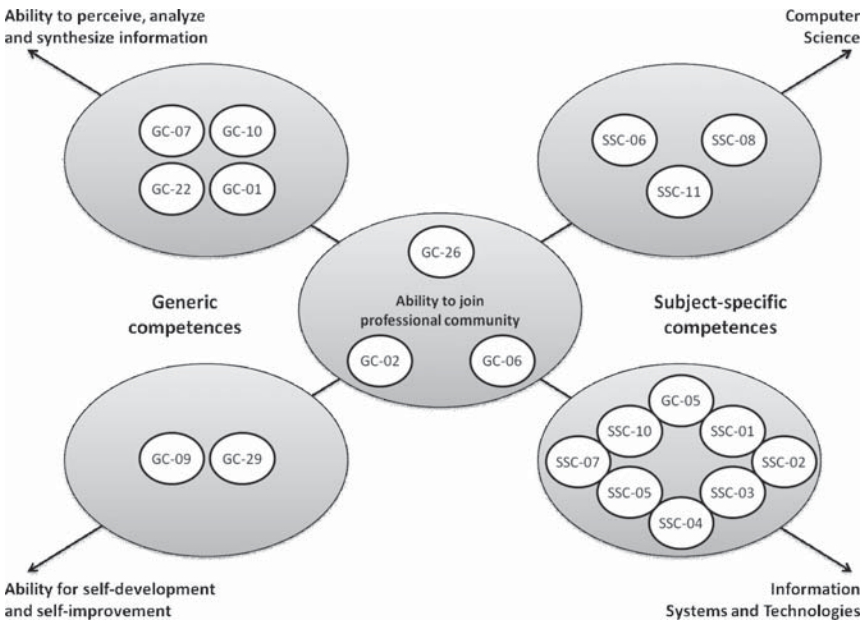
Key competences	Other competences
GC 9 Capacity to learn and stay up-to-date with learning. GC 29 Ability to focus on results.	GC 11 Ability to work autonomously. GC 19 Ability to plan and manage time. GC 23 Commitment to safety. GC 14 Appreciation of and respect for diversity and multiculturality. GC 15 Ability to act with social responsibility and civic awareness. GC 21 Ability to be critical and self-critical. SSC 16 To collect, process and systematize professional knowledge in information technology and appreciate the importance of life-long learning (continuing education, retraining, and self-learning) for the necessary adaptation to the evolution of the profession and society.
MGC 3 Ability to join professional community	
GC 26 Knowledge and understanding of the subject area and understanding of the profession. GC 2 Ability to work in a team. GC 6 Ability to apply knowledge in practical situations.	GC 25 Ability to undertake research at an appropriate level. GC 30 Ability to innovate. GC 18 Ability to communicate with non-experts of one's field. GC 20 Ability to evaluate and maintain the quality of work produced. GC 27 Ability to resolve conflicts and negotiate. GC 3 Capacity to generate new ideas (creativity). GC 28 Ability to focus on quality. GC 16 Ability to act on the basis of ethical reasoning. GC 17 Commitment to the conservation of the environment. GC 24 Interpersonal and interaction skills. SSC 14 To appreciate the social considerations and ethical issues affecting the professional practice.

Key competences	Other competences
MSSC 1 Ability to understand, apply and develop mathematical knowledge, basic laws of natural science, knowledge in problem domain (related to professional activity) and fundamentals of information technologies (related to Computer Science sub-discipline of CC2005)	
SSC 11 To apply and develop fundamental and multidisciplinary knowledge, including mathematical and scientific principles, quantitative methods, tools (including software relevant to their engineering discipline) and notations for successful solving problems. SSC 6 To develop and bring into effect new competitive ideas in the area of ICT. SSC 8 To analyze, choose and apply methods and aids to provide information security.	SSC 13 To know and apply core ICT theoretical and practical knowledge, principles and tools. GC 8 Skills in the use of information and communications technologies.
MSSC 2 Ability to design, develop, implement and manage life cycle processes of information systems and technologies (related to Information Systems and Technologies sub-discipline of CC2005)	
GC 5 Ability to design and manage projects. SSC 1 To analyze subject area, identify, classify and describe problems; find the methods and approaches for their solving; define requirements. SSC 2 To design ICT systems, including modelling (formal description) of structure and processes. SSC 3 To develop and implement ICT systems. SSC 4 To deploy, install, integrate, put into service and maintain ICT systems and their elements. SSC 5 To guarantee the quality of information systems according to the requirements. SSC 7 To know, follow and assess the degree of compliance with industry specifications, standards, regulations, and recommendations. SSC 10 To train ICT users and provide them technical support.	SSC 9 To manage economic, human, technological and other resources efficiently. SSC 12 To prepare technical and methodical materials for presenting ICT system in every stages of the life cycle of information systems. SSC 15 To estimate and appreciate economic and commercial issues affecting the professional practice.

The core element of the final set of meta-competences is the ability to join the professional community (MGC 3). This meta-competence is achieved by mastering:

- generic meta-competences – the ability to perceive, analyse and synthesize information (MGC 1) on the one hand, and the ability for self-development and self-improvement (MGC 2) on the other hand;
- subject-specific meta-competences – the ability to understand, apply and develop mathematical knowledge, basic laws of natural science and fundamentals of information technologies (MSSC 1), i.e. group of competences related to Computer Science sub-discipline of ICT, on the one hand, and the ability to design, develop, implement and manage life cycle processes of information systems and technologies (MSSC 2), i.e. group of competences related to Information Systems and Technologies sub-disciplines of ICT on the other hand.

Meta-competences are identified to represent the core of degrees in the ICT subject area – this document concerns the following professional sub-



Graphic 7
Meta-profile diagram for ICT

disciplines of this large subject area: Computer Science and Information Systems and Technologies. However, the described approach can also be applied to other ICT sub-disciplines.

Meta-competences should be developed up to a certain level by every graduate of any first-cycle degree (Bachelor) within the specific ICT sub-disciplines, regardless of his/her profile, his/her particular degree configuration. Without these key competences a students cannot gain access to any second-cycle (Master) degree in this subject area.

The diagram of the meta-profile for the specific ICT sub-area is presented below.

4.6. Subject specific competences – Languages

4.6.1. Subject specific competences – Foreign Languages[14]

In developing the subject specific competences, Languages group took into account that, regardless of the focus of a particular programme in Languages, the four key elements that typify the knowledge and understanding outcomes of such programmes are:

- the use of the target language for purposes of understanding, expression and communication;
- intercultural awareness, understanding and competence;
- explicit knowledge of language;
- knowledge of aspects of the cultures, communities and societies where the language is used.

The acquisition of skills (primarily reading, writing, listening and speaking) in a foreign language is a central objective of language programmes. Programmes endeavour to enable students to develop and use such skills, as appropriate to the target language and to the learning outcomes of the programme. Certain aspects of effective language use may be related primarily to the development of particular language skills, which themselves require specific knowledge. Thus, for example, advanced

[14] Dyukarev Ivan, Altuna Asier, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Foreign Languages.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

productive skills of writing and speaking in the target language require a high level of knowledge of the grammatical, discoursal and pragmatic conventions that govern language use, and of the societal factors which make language use effective.

Languages graduates should normally reach a high level of understanding of the target language(s). They are expected to be able to exhibit appropriate levels of achievement in productive (speaking and writing) and receptive (reading and listening) language skills, and mediation (translating and interpreting) if necessary. They should be fluent and accurate target language users in a wide range of personal, academic and other domains. They should be at ease with a wide range of topics and registers in formal and informal situations, and be familiar with a wide range of source materials in the target language.

Based on the assumptions described above, the working group on Languages has developed the following list of subject specific competences for students specializing in Teaching Foreign Languages:

1. Language 1	Mastery of the grammar, vocabulary and phonology of Foreign Language 1 at the European C2 Level
2. Language 2	Mastery of the grammar, vocabulary and phonology of Foreign Language 2 at the European C1 Level
3. Language Analysis	Understanding of the theoretical underpinnings of language use (Languages 1 and 2) including the process of language acquisition, language change and development, contemporary issues in linguistics
4. Communication	Ability to use the knowledge and skills in foreign language(s) for the purposes of effective functioning in a native language environment including the development of the skills of listening, speaking, reading and writing in a foreign language/foreign languages (C2/C1 level)
5. Discourse	Ability to create texts and modify speech in a foreign language/foreign languages in accordance with the needs of the situation/context in which the discourse occurs
6. Society and Culture	Ability to use the knowledge of the history, geography, contemporary social and cultural issues of the country/ies where the foreign language/languages are spoken for the effective choice of communicative strategies in oral or written discourse

7. Methodology	Ability to apply the theoretical knowledge and understanding of the process of foreign language acquisition to the practice of teaching foreign languages including the development of curricula, creation of syllabi and course materials, organisation of the foreign language learning environment and classroom teaching
8. Pedagogy	Ability to use knowledge of the theory of education for the effective application to the situations of classroom teaching including the organisation of adequate learning environment, choice of teaching style and methodology, teacher-learner communication
9. Psychology	Ability to use the knowledge and understanding of developmental psychology for the effective organisation of the process of foreign language teaching and learning

The list of subject-specific competences above takes into account the four aspects described previously as well the necessity to develop specific competences in pedagogy and psychology as the students are trained to be teachers of foreign languages.

In the work on developing the list of specific competences the working group on Languages compiled a more detailed list for the purposes of consultation (with students, graduates, academics and employers).

The list of specific competences in the Field of Teaching Foreign Languages after the consultation is:

1. Mastery of grammar, vocabulary and pronunciation at the level sufficient to allow communication at the C 1 level for the first foreign language.
2. Mastery of grammar, vocabulary and pronunciation at the level sufficient to allow communication at the B 2 level for the second foreign language.
3. Ability to use foreign languages for effective oral communication.
4. Ability to create own texts in accordance with the needs of the situation.
5. Ability to demonstrate knowledge of the history, geography, contemporary social and cultural issues of the countries where the languages are spoken.
6. Understanding of the main stages of development of literature in the foreign language.

7. Ability to use socio-cultural knowledge for the purposes of effective communication and information processing.
8. Understanding of the main stages of development of the foreign language.
9. Understanding of the theoretical underpinnings of language use including the phonetic, semantic, grammatical, textual and discoursal aspects.
10. Ability to compare and contrast the aspects of foreign and native languages.
11. Ability to use knowledge of developmental psychology and the process of language acquisition in the practice of teaching foreign languages.
12. Ability to use knowledge of the methodology of teaching foreign languages in the practice of teaching.
13. Ability to use knowledge of the theory of education for the effective organization of the process of teaching foreign languages.
14. Ability to teach literature and culture of the countries where foreign languages are spoken (Master).
15. Ability to analyze cultural differences and to teach in a multi-cultural environment.
16. Ability to use knowledge about non-verbal communication and models of behaviour in the practice of teaching and communicating.
17. Ability to use foreign languages for the purposes of professional development.
18. Mastery of the methodology of philological and linguistic analysis, ability to use the methodology in the practice of working on an individual research project.

In the further work on competences, there emerged the necessity of uniting them in macro-complexes which would present in a summarized way the groups of general and subject specific competences. This would aim at a more compact representation of the required minimum of the content while constructing language educational programmes.

The meta-competences that the group arrived at present the core of an educational programme in the field which combine competences from the list of generic and subject specific competences into macro-competences while synthesizing groups of similar or overlapping skills and fields of knowledge. While working on the definition of the meta-competences, the group tried to use the language and terminology accepted in the professional field of foreign language teaching which requires no further explanation.

When working on the list of meta-competences, the group agreed that irrespective of the programme focus, the language programme is first and foremost aimed at developing the mastery of the first and second foreign language at a level sufficient for the effective communication with the educated native speakers of these languages. Thus, the central meta-competence, which defines the essence of any language programme may be defined as follows:

> "Mastery of the First and Second Foreign Language (including Grammar, Vocabulary, Phonology, Pragmatic and Discoursal Features) at the C1 (First Language) and B 2 (Second Language) Level".

This meta-competence combines and synthesizes the following generic and subject specific competences:

1. Mastery of grammar, vocabulary and pronunciation at the level sufficient to allow communication at the C 1 level for the first foreign language and B2 level for the second foreign language.
2. Ability to communicate in a second language.

The linguistic competence of a graduate of a language programme is closely connected with the necessity to use their language ability for the purposes of effective communication in real situations without which it is impossible to serve as a language professional. In this connection, the second most important meta-competence of the graduate which is closely connected with the first, may be formulated as follows:

> "Ability to communicate effectively in the foreign language/s orally and in writing"

This meta-competence comprises the following subject-specific competences:

1. Ability to use foreign languages for effective oral communication.
2. Ability to create written texts in the foreign languages in accordance with the needs of the situation.

3. Ability to use knowledge about non-verbal communication and models of behaviour in the practice of teaching and communicating.
4. Ability to use foreign languages for the purposes of professional development.

The mastery of a foreign language and the ability to communicate effectively with educated speakers of the foreign language are closely connected with the most important professional meta-competence of a graduate of language programmes with specialization in teaching, which can be formulated as follows:

> "Ability to teach foreign languages in accordance with the Russian educational standards and the European tendencies and recommendations".

This meta-competence is based on the following generic and subject-specific competences:

1. Ability to apply knowledge in practical situations.
2. Ability to work autonomously.
3. Ability to use knowledge of the methodology of teaching foreign languages in the practice of teaching.
4. Knowledge and understanding of the subject area and understanding of the profession.

The mastery of foreign languages and the ability to teach them are based on the ability to analyse and synthesize information including the facts of language as well as textual information:

> "Ability to analyse and synthesize including the ability to analyze linguistic data, literary and other texts".

In formulating this meta-competence, the following generic and subject-specific competences are combined:

1. Ability for abstract thinking, analysis and synthesis.
2. Ability to identify, formulate and resolve problems.

3. Ability for critical thinking.
4. Ability to search for, process and analyse information from a variety of sources.
5. Understanding of the main stages of the development of literature in the foreign language.
6. Understanding of the theoretical underpinnings of language use including the phonetic, semantic, grammatical, textual and discursive aspects.
7. Understanding of the main stages of the development of the foreign language.
8. Ability to compare and contrast aspects of foreign and native languages.

Fluency in a foreign language, effective communication and teaching are impossible without mastery of a required minimum of background knowledge which presents in a compressed way cultural knowledge from the fields of geography, history, literature and everyday life of the countries where these foreign languages are spoken. Besides, one of the basic meta-comptences of a graduate of a language programme is respect for the cultural differences and multi-culturalism.

Thus, the subject area group has formulated the corresponding meta-competences as follows:

> "Ability to use socio-cultural knowledge for the purposes of effective communication" (based on the following competences: "Ability to demonstrate knowledge of the history, geography, contemporary social and cultural issues of the countries where the languages are spoken; and "Ability to use the socio-cultural knowledge for the purposes of effective communication and information processing");

"Respect for diversity and multi-culturality including linguistic diversity" (based on the following competences: "Ability to analyse cultural differences and to teach in a multi-cultural environment", "Ability to act with social responsibility and civic awareness", "Ability to act on the basis of ethical reasoning".

The ability to teach foreign languages is impossible without mastery of the required minimum of knowledge and skills fin the fields of the

theory of education and psychology especially such branches as didactics, developmental psychology and psycholinguistics. In this connection, the following meta-competences have been formulated by the subject area group:

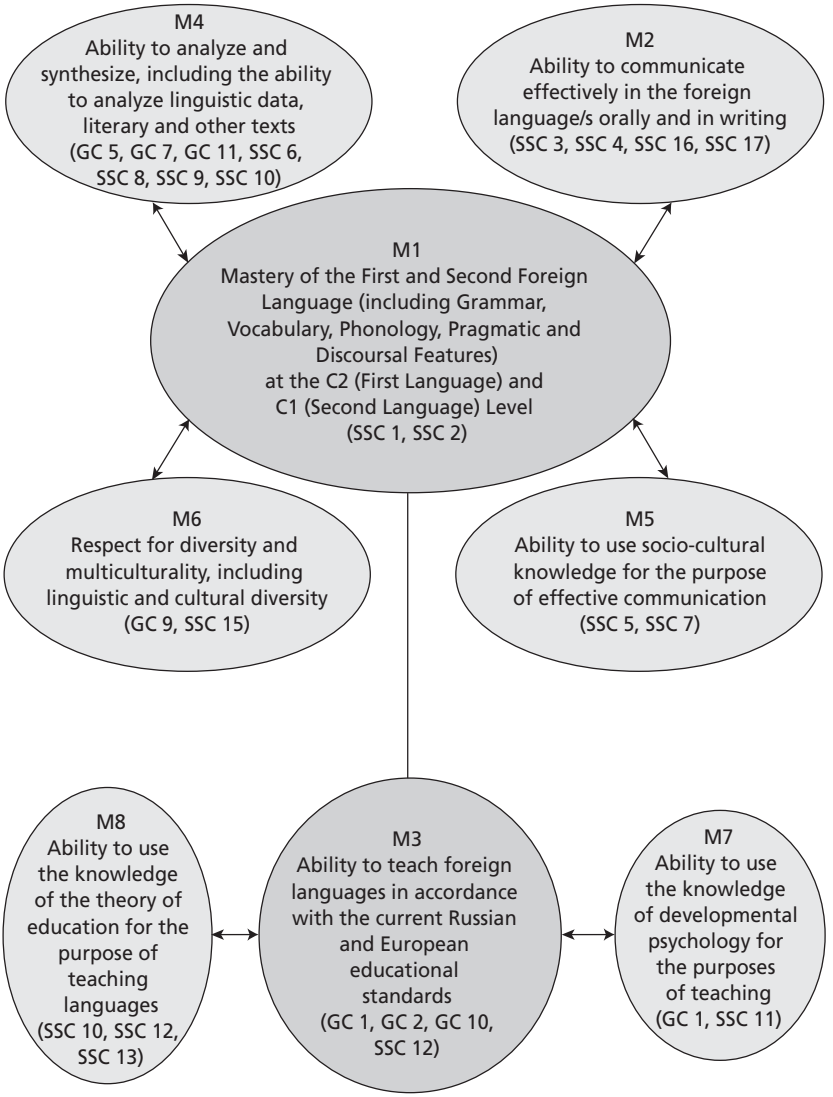
> "Ability to use knowledge of developmental psychology for the effective organization of the process of teaching foreign languages"; "Ability to use knowledge of the theory of education for the purposes of teaching foreign languages".

These meta-competences synthesize in their definitions some of the previously defined generic and subject specific competences:

1. Ability to apply knowledge in practical situations.
2. Ability to compare and contrast the aspects of foreign and native languages.
3. Ability to use knowledge of developmental psychology and the process of language acquisition in the practice of teaching foreign languages.
4. Ability to use knowledge of the methodology of teaching foreign languages in the practice of teaching.
5. Ability to use knowledge of the theory of education for the effective organization of the process of teaching foreign languages.

As was mentioned earlier, the formulated meta-competences present the essence of any educational programme in the subject area "Foreign Languages" and represent in a compressed way the lists of generic and specific competences described earlier. It is assumed that the graduate of any educational programme specializing in languages will have developed them; they will also serve as the entry requirement to any further studies at the graduate level.

The meta-competences and their inter-connectedness are graphically represented below.



Graphic 8
Meta-Profile Diagram in Foreign Languages

4.6.2. Subject specific competences – Interpreting and Translation[15]

From the list of generic competences list the group proceeded to the selection of subject specific competences which are indispensable for degree training of skilled interpreters/translators. These competences seem to be essential for the interpreter/ translator to perform successfully the multi-task professional activities. When choosing them, the group tried to take into account all the aspects of the usual tasks fulfilled by translators and interpreters that would reflect stage-by-stage work.

First of all, Methodology competence (SSC 2) is needed to give thumbnails of consistent and coherent research that would be of use not only during university studies, but also during the implementation of future independent translation projects. From this point of view it resonates with Management competence (SSC 3), which lie at the core of organizational activity, as well as Information Technology competence (SSC 1). The modern digititalized world necessitates Information Technology proficiency. In questions of time and efficiency a translator or interpreter can hardly be competitive without the use of computer-assisted tools.

The subject area revolves around language proficiency and its different aspects. Thus, Language competence (SSC 10) will be the essential and indispensable basis. Interpreting (SSC 8) and Translation (SSC 9) are functional core competences. Corroborating elements, Pragmatic and Stylistic Adaptation (SSC 5) and Communication competence (SSC 4) are part of Language competence and lie on the subordinate level of the interpreting/translation activity proper, but at the same time these two competences are key ones for successful social and professional communication at large.

The subject area in question becomes more and more multitasking and, hence, to be a fully-fledged professional, a translator/interpreter needs to be able to accomplish associate functions as well. Re-writing and Editing competence are examples of such multitask capability. For example, the editing process helps to improve the organization, tone and consistency of the content, define and correct all the translation errors and transfer

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[15] Dyukarev Ivan, Altuna Asier, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Interpreting and Translation.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

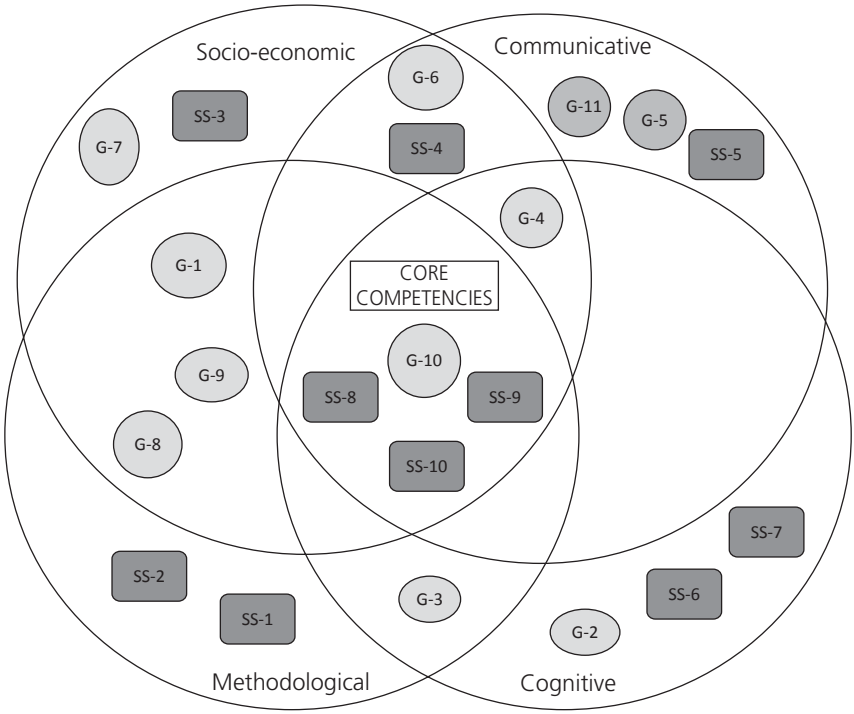
the necessary information with regard to the target reader. Skill in editing involves the culture of speech, translation quality, self-assessment and contributes to the personal development of the interpreter/translator.

The list of subject specific competences is:

1. Information Technology competence: possession of computer-aided skills for translation/interpreting, skills in using ICT specific for translators/interpreters, skills in terminology search.
2. Methodology competence: ability to use the systemic knowledge of the source and target languages in one's own piece of research; ability to use the systemic knowledge of current Translation Studies in an independent piece of research and to elaborate it extensively as an MA thesis.
3. Management competence: ability to set up a translation pool, and to coordinate the project activities of staff and freelance translators. Ability to manage translation projects in the broad sense of the word: creation of tasks, cost and deadline assessment, evaluation of job types with subsequent task segmentation, creation of text corpora, management of translation memory.
4. Communication competence: socio-cultural, cross-cultural and communication competence combined with the practical use of translator's behavior code, and the knowledge of translator's licenses and duties.
5. Pragmatic and Stylistic Adaptation competence: ability to reproduce the source text with the help of the target language stylistic adaptations of various types and the target reader-oriented adapting strategy, in accordance with the norms of the target language and the criteria applied to a high-quality translation.
6. Editing Competence: skill in editing and reviewing all basic types of texts in languages B, C, A.
7. Re-writing competence: skill in producing a new text on the basis of the target text («rewriting»), as well as generating independent texts like business correspondence, commercials, etc., in languages B, C, A.
8. Interpreting competence: the ability to perform consecutive one- and two–way/liaison interpreting from B, C into A and from A into B, C, and simultaneous interpreting from B, C into A.
9. Translation competence: skill in translating and localizing all basic types of texts, together with providing comments and references required.
10. Language competence: language B competence at the C2 level, language C competence at the C1 level.

The meta-profile of the subject area "Interpreting and Translation" was designed after all the relevant competences, both general and subject specific, had been analyzed and re-categorized. As a result of this procedure, four groups of competences were singled out: cognitive, communicative, socio-economic, and methodological, with four competences described as core ones being shared by all the categories.

Below, it was presented a graph featuring the meta-profile in general, and a table treating it in more detail.



Graphic 9
Meta-profile Diagram in Interpreting and Translation

As shown above, all the competences relevant to the subject area **"Interpreting and Translation"** can be grouped into four categories on the basis of functional and semantic analysis and are referred to as meta-competences:

- Communicative.
- Cognitive.
- Methodological.
- Socio-economic.

Below it was described each of the corresponding domains in relation to the selected generic and subject-specific competences:

Communication	Is paramount in any profession due to its comprehensive and fundamental nature. In translation and, especially, in interpreting, communication becomes the focal point and conglomeration of both generic and subject-specific competences
Cognition	implies acquiring, storing, processing and analysing information. Thus, cognitive structures are directly related to the content of main components of the meta-profile. In interpreting/translation a conceptual projection is taking place between the source language and target language. The information stored in conceptual structures of the source language is mapped into the conceptual structure of the target language and proper linguistic form in target language is found to correspond conceptual structure.
Methodology	is used for professional organization and regularizing the approaches to the acquisition of knowledge and its application. Methodology shapes the cognitive structures into a model of professional aptitude/qualification and provides a specialist in interpreting/translation with the systemic knowledge of both the source/target languages and methods of their research, translation/interpreting from one language to another.
Socio-economic domain of the meta-profile	relates the profession both to society as a whole and to separate sectors of the economy within society. It is impossible to define a profession without defining its relation to the socio-economic system within and for which it exists and functions. For the subject area of interpreting/translation it necessarily involves such areas as education, mass media, advertising, marketing, management, law, economy, business, etc.

The diagram and the table show how 4 components overlap thus creating **4 central (core) competences:**

- G 10 Knowledge and understanding of the subject area and understanding of the profession.
- SS 8 Interpreting competence: the ability to perform consecutive one- and two-way/liaison interpreting from B, C into A and from A into B, C, and simultaneous interpreting from B into A.
- SS 9 Translation competence: skill in translating and localizing all basic types of texts, together with providing comments and references required.
- SS 10 Language competence: language B competence at the C2 level, language C competence at the C1 level.

The competences that are **non-overlapping,** that is, the competencies that belong to **only one component:**

Communicative meta-competences:

- G5 Interpersonal and interaction skills.
- SS5 Pragmatic and Stylistic Adaptation competence: ability to reproduce the multi-layer structure of the source text with the help of the target language stylistic adaptations of various types and the target reader-oriented adapting strategy, in accordance with the norms of the target language and the criteria applied to a high-quality translation.

Socio-economic meta-competences:

- G7 Ability to apply knowledge in practical situations.
- SS3 Management competence: ability to set up a translation pool, and to coordinate the project activities of staff and freelance translators. Ability to manage translation projects in the broad sense of the word: creation of tasks, cost and deadline assessment, evaluation of job types with subsequent task segmentation, creation of text corpora, management of translation memory.

Methodological meta-competences:

- SS1 Information Technology competence: possession of computer-aided skills for translation/interpreting, skills in using/basic skills in designing ICT specific for translators/interpreters, skills in terminology search.
- SS2 Methodology competence: ability to use the systemic knowledge of the source and target languages in one's own piece of research; ability to use the systemic knowledge of current Translation Studies in an independent piece of research and to elaborate it extensively as an MA thesis.

Cognitive meta-competences:

- SS6 Editing Competence: skill in editing and reviewing all basic types of texts in languages B, C, A.
- SS7 Re-writing competence: skill in producing a new text on the basis of the target text («rewriting»), as well as generating independent texts like business correspondence, commercials, etc., in languages B, C, A.
- G2 Ability to search for, process and analyse information.

Overlapping competences, that is, the competencies that belong to two or more components:

Communicative + Socio-economic meta-competences:

- G6 Respect for diversity and multiculturality.
- SS4 Communication competence: socio-cultural, cross-cultural and communication competence combined with the practical use of translator's behavior code, and the knowledge of translator's licences and duties.

Communicative + Cognitive + Socio-economic meta-competences:

- G4 Ability to communicate both orally and in written form in the native language.

Socio-economic + Methodological meta-competences:

- G1 Ability to identify, pose and resolve problems.
- G8 Ability to focus on results.
- G9 Ability to work autonomously.
- G11 Ability to work in a team.

Methodological + Cognitive meta-competences:

- G3 Ability for analysis and synthesis.

4.7. Subject specific competences – Law[16]

Within the Tuning Project the group examined Russian education standards of the third generation in Law and the lists of those competences that were suggested by European experts (as well as the competence list formed within the Project "Tuning-Latin America" and later implemented to develop Law educational programmes in other countries). At this stage the experts tried to detect knowledge and skills typical of Bachelors and Masters in Law. It was stated that the competences in Law and legal expertise differ from each other and cannot be comparable. That's why it was decided to coordinate subject competences only in Law.

The list of subject competences in Law is:

1. Good knowledge of legal terminology and techniques.
2. Ability to develop normative legal acts.
3. Ability to implement normative acts, to realize rules of law in certain professional spheres and to develop legal documents.
4. Ability to qualify facts and situations in a legally correct manner.
5. Ability to assist in legality, law and order.

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[16] Dyukarev Ivan, Canedo Arrillaga Maria Pilar, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Law.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

6. Ability to take well-founded legal decisions in accordance with current legislation.
7. Ability to prevent law infringements, detect and eliminate the causes and conditions leading to human rights infringements.
8. Ability to implement and explain national legislation as well as the norms and principles of international law.
9. Ability to use basic principles and methods of human, social and economic sciences to solve professional tasks.
10. Ability for interdisciplinary cooperation and ability to work in a team with the representatives of other professional spheres as a legal expert.
11. Ability to implement in professional activity up-to-date research methods and methodologies.
12. Ability to teach legal subjects.
13. Ability to manage student's independent work.
14. Ability to communicate professionally in a foreign language.

After consultations with European experts and taking in account the analysis results, the members of the Subject Area Group decided to single out as meta-competences those subject competences that were estimated highly by all groups of respondents, namely:

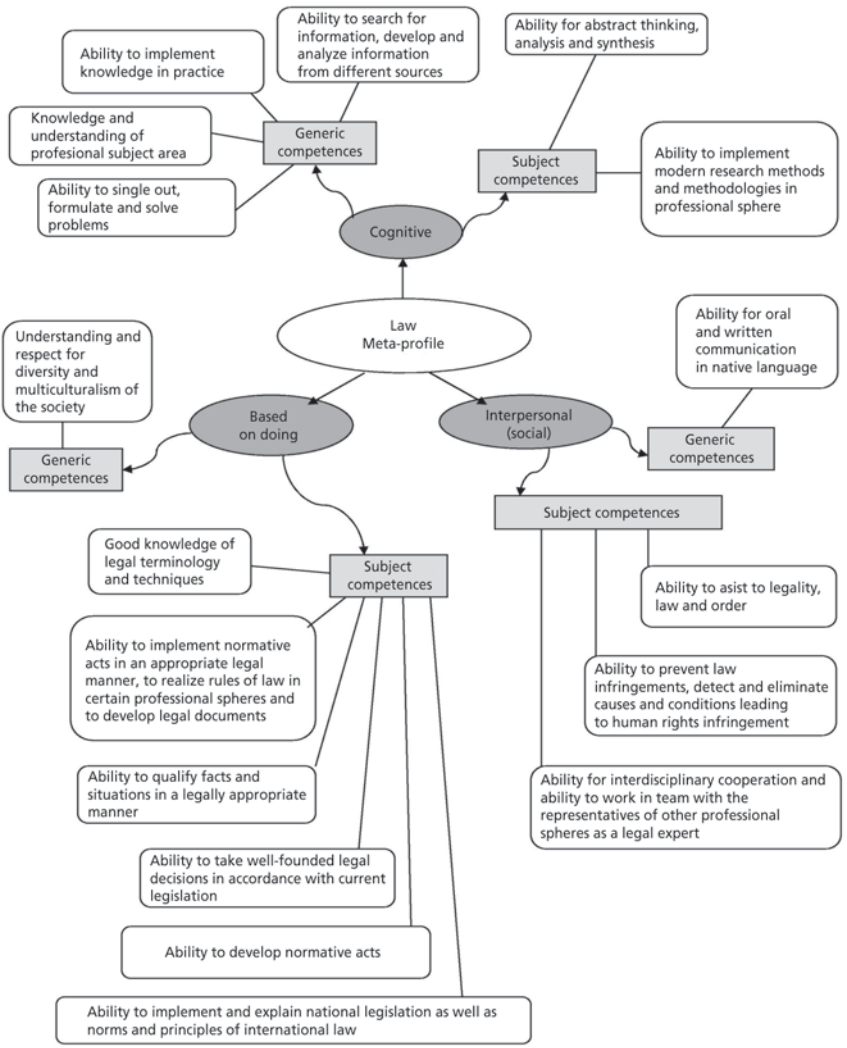
- SCC 1 – Good knowledge of legal terminology and techniques.
- SCC 4 – Ability to qualify facts and situations in a legally appropriate manner.
- SCC 3 – Ability to implement normative acts in an appropriate legal manner, to realize rules of law in certain professional spheres and to develop legal documents.

These very competences define the subject area "Law". To acquire them is obligatory for Bachelors in Law, independently from their future job in this sphere. These subject competences can be called universal for lawyers.

For the formation of meta-competences within the study process the following factors are important:

- development of students' interest in legal professional activity, understanding of its peculiarities and its role in the modern world;

- formation of: students' necessity in personal and professional growth; understanding of the necessity to get professional knowledge and skills; understanding of the role of own activity in the process of professional establishment;



Graphic 10
Meta-profile diagram in Law

- meetings with practising lawyers, observing the performance of different types of legal activity in real situations (in courts, public prosecutor's offices etc.), discussions, team and individual work, reports, writing of essays, team reflection, round tables, gaming simulation;
- formation of students' understanding of the essence and specificity of legal activity; knowledge of the essence, structure and content of lawyers' professional competency;
- examination of normative acts regulating lawyers' activity, discussion of specific details of legal activity, development of the content of professional competency of a future lawyer;
- development of students' skills of self-diagnosis of personal qualities;
- skills of performance of the analysis of personal value, senses, qualities, opportunities and abilities in the context of future professional activity.

4.8. Subject specific competences – Social Work[17]

Working on subject-specific competences the group of Social Work initially proceeded from the list of **20 competences presented in the Federal State Standard of Higher Vocational Education.** The group went through a hard working process to develop the initial list of subject specific competences: researching literature related to Tuning methodology, consultation with experts of Padua University, academics, discussions within the subject area group. On this basis, the initial list was partially modified by classifying subject specific competences into 4 groups related to professional activities of social workers, and a **new list of 16 sets** was drawn up.

The groups of these competences are designated as:

- Socio-technological.
- Research.
- Organizational and managerial.
- Project activities.

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[17] Dyukarev Ivan, Surian Alessio, Serbati Anna, Karavaeva Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Social Work*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

The competences are:

Socio-technological	1. Ability to implement modern technologies of social protection, medical and social support to vulnerable groups
	2. Ability to provide welfare, socio-psychological, socio-economic and socio-legal services to individuals and social groups
	3. Ability for mediation, socio-preventive and counselling activities on socialization, habilitation and rehabilitation.
	4. Ability to create a favourable social and psychological environment in social organizations and services
	5. Ability to prevent professional "burnout"
	6. Commitment to professional and ethical requirements in the course of professional activity
	7. Ability of the appropriate use of legislative and other normative acts on federal and regional levels
Research	8. Ability to research specific socio-cultural space, infrastructure of social welfare representatives of various social groups
	9. Ability to identify, formulate and solve problems in the field of psycho-social, structural and holistic-centred social work, medical and social assistance
	10. Ability to determine scientific and practical value of the current research problems in social welfare
Organizational and managerial	11. Management and organizational capacity to work in social institutions and services
	12. Ability to coordinate activities to identify people in need of social protection, medical and social assistance
Project activities	13. Ability to participate in the development of social intervention and economic and social scope of project activities of social service agencies
	14. Ability to create social projects tailored to national and cultural space and the character of various national, age and gender and social class groups
	15. Commitment to the development and implementation of pilot and innovative projects for public and corporate social policy to deal with difficult life situations of different social groups
	16. Ability to create social projects to ensure the physical, mental and social health, involving supplementary funds (fundraising)

There are many typologies of competences, from which the group choose the most optimal, because it could be considered as basic and acquirable for Meta-Profile. This typology was suggested and successfully implemented in University of Deusto. According to this typology competences can be classified under three main headings:

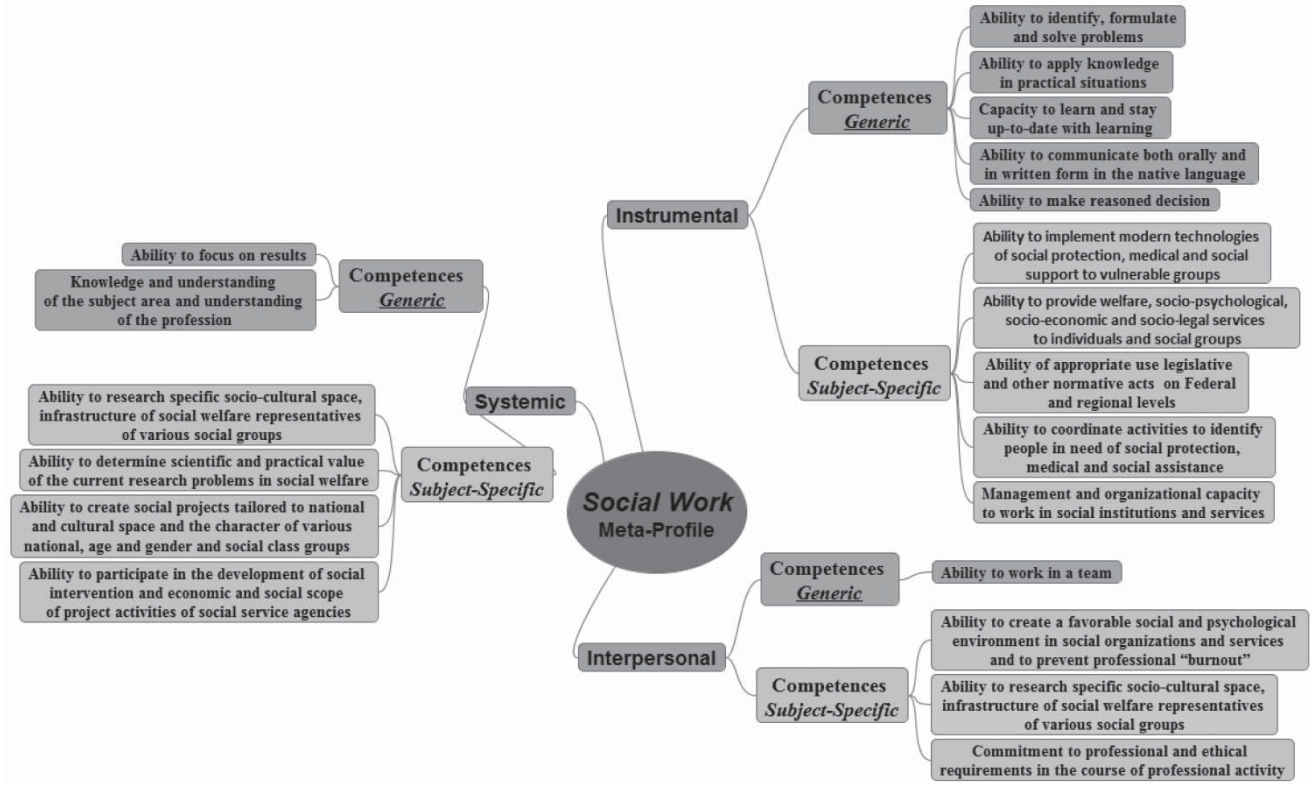
- Instrumental – competences that function as a means to an end and require a combination of manual skills and cognitive capacities that are needed for professional competence;
- Interpersonal – competences requiring personal and relational abilities to act with generosity and understanding towards others and foster social interaction and cooperation;
- Systemic – competences involving skills and abilities related to an entire system. They require a combination of imagination, sensibility and ability, enabling one to see how the parts of a whole are conjoined and related. These competences are built on previously acquired instrumental and interpersonal competences.

According to this typology the list of macro competences for Meta-Profile of Social Work subject area may include the following general and subject-specific competences:

Table 17
List of Macro competences for Meta-profile

Meta-competences	
Generic	Subject-specific
Instrumental	
Ability to identify, formulate and solve problems	Ability to implement modern technologies of social protection, medical and social support to vulnerable groups.
Ability to apply knowledge in practical situations	Ability to provide welfare, socio-psychological, socio-economic and socio-legal services to individuals and social groups.

Meta-competences	
Generic	Subject-specific
Capacity to learn and stay up-to-date with learning	Ability of appropriate use legislative and other normative acts on Federal and regional levels
Ability to communicate both orally and in written form in the native language	Management and organizational capacity to work in social institutions and services
Ability to make reasoned decision	Ability to coordinate activities to identify people in need of social protection, medical and social assistance
Interpersonal	
Ability to work in a team	Ability for mediation, socio-preventive and counseling activities on socialization, habilitation and rehabilitation
	Ability to create a favorable social and psychological environment in social organizations and services and to prevent professional "burnout"
	Commitment to professional and ethical requirements in the course of professional activity
Systemic	
Knowledge and understanding of the subject area and understanding of the profession	Ability to research specific socio-cultural space, infrastructure of social welfare representatives of various social groups
Ability to focus on results	Ability to determine scientific and practical value of the current research problems in social welfare
	Ability to participate in the development of social intervention and economic and social scope of project activities of social service agencies
	Ability to create social projects tailored to national and cultural space and the character of various national, age and gender and social class groups



Graphic 11
Meta-Profile Diagram for Social Work

Meta-competences (key competences) should be developed up to a certain level by every graduate of any first-cycle degree (Bachelor) within subject area of Social Work, regardless of his/her profile, his/her particular degree configuration. Without these key competences a students cannot get access to any second-cycle (Master) degree in the subject area of Social Work.

4.9. Subject specific competences – Tourism[18]

The process of formation of the list of professional competences in the field of study "Tourism" qualification - Bachelor is complex and quite long, which involves all stakeholders (students, graduates, employers and the academic community). It is important that this process is dynamic and flexible. Therefore, at the stage of formation of the list of competencies for tourism group consultations were held with the above target groups, who have been informed about:

- the objectives of the study;
- ways to generate this list;
- the possibilities of its application.

In developing the list of professional competences included the following steps:

- Analysis of the GEF;
- Conduct interviews with students;
- Consultation with the professional community;
- Analysis of professional activity (functional responsibilities), a specialist in tourism;
- Analysis of the production documentation (job descriptions, qualification cards, professiogram);

[18] Dyukarev Ivan, De la Rica Álvaro, Goytia Prat Ana, Karavaeva Evgeniya, eds. Reference Points for the Design and Delivery of Degree Programmes in Tourism. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

- Working groups of experts - members of the academic community within each high school party and interuniversity consortium advice.

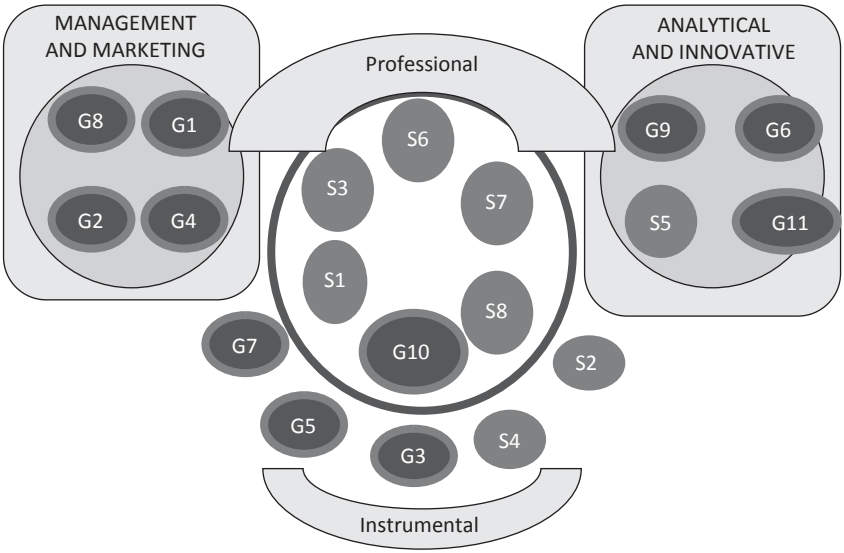
The list of subject specific competencies is:

1. Ability to identify and evaluate the tourist and recreational potential of objects and areas.
2. The ability to conduct monitoring studies of the tourist market.
3. The ability to orient in the organization of tourist and recreational space.
4. Ability to design tourist documentation when working with the tourist.
5. Ability to cooperate with partner organizations.
6. Ability to provide cash settlement bank transactions.
7. The ability to organize and carry out the implementation of the tourism product.
8. Ability to use in the tourist organization information technology and office equipment.
9. Ability to develop new tourism products and the use of modern technology customer service.
10. The ability to implement effective internal communications in Tourism Organization.
11. Ability to form and implement external communications Tourism Organization.
12. Ability to assess the costs for professional activity in the tourism organization.
13. The ability to practice the basics of the current legislation in the tourism sector and to track changes in it.

After the consultation process the definition of meta-competences were based on:

1. Classification of competences into basic, unique and competence-related segments, covering the major field of professional activity of graduates (workers).
2. Clustering the meta-competences that form the basis for the formation of academic disciplines educational modules, competence potential of which provides a specialist, meeting to the needs of the tourism industry.

3. Justification and formulation of meta-competencies that (at a certain level) any graduate of the first cycle of HPE (undergraduate) in a given subject area should possess, regardless of the profile (orientation) training, which would be the basic requirement for baccalaureate graduates and MA course applicants.



Graphic 12
Meta-Profile Diagram for Tourism

C. References

BENEITONE, P., ESQUETINI, C.; GONZALEZ, J.; MARTY MALETA, M.; SIUFI, G. and WAGENAAR, R. eds. *Reflexiones y Perspectivas de la Educación Superior en América Latina. Informe Final-Proyecto Tuning-América Latina. 2004-2007*. Bilbao: University of Deusto, 2007.

BRYK, A.S. and RAUDENBUSCH, S.W. (1992). *Hierarchical Linear Models: Applications and Data Analysis Methods.* Sage Publications.

DRAPER, D. (1995). "Inference and hierarchical modelling in the social sciences". *Journal of Education and Behavioral Statistics 20*, 115-147.

GOLDSTEIN, H. (1992). "Statistical information and the measurement of education outcomes (editorial)". *Journal of the Royal Statistical Society, A,* 155: 313-15.

Goldstein, H (1995). *Multilevel Statistical Models.* London, Edward Arnold: New York, Halstead Press.

Goldstein, H. and Spielgelhalter, D. (1996). "League tables and their limitations: Statistical issues in comparisons of institutional performance". *Journal of the Royal Statistical Society, Series A* 159, 385-443.

GOLDSTEIN, H.; RASBASH, J.; YANG, M.; WOODHOUSE, G.; PAN H. and THOMAS, S. (1993). "A multilevel analysis of school examination results". *Oxford Review of Education,* 19: 425-33.

GONZALEZ, J. and WAGENAAR, R. (2008). *Universities contribution to Bologna Process*. Bilbao: University of Deusto, 2008.

DYUKAREV, Ivan; RYAN, Paul and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Ecology*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; MCCABE, Patrick and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Economics*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

Dyukarev, Ivan; MCCABE, Patrick and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Management*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; GILPIN, Arlene and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Education*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; Manoliu, IACINT and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Environmental Engineering*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; RAYON, Alex and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Information and Communication* Technologies. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; ALTUNA, Asier and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Foreign Languages*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; ALTUNA, Asier and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Interpreting and Translation*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; CANEDO ARRILLAGA, Maria Pilar and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Law*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; SURIAN, Alessio; SERBATI, Anna and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Social Work*. Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

DYUKAREV, Ivan; DE LA RICA, Álvaro; GOYTIA PRAT, Ana and KARAVAEVA, Evgeniya, eds. *Reference Points for the Design and Delivery of Degree Programmes in Tourism.* Bilbao: Deusto University Press, 2013, http://www.deusto-publicaciones.es/deusto/index.php/es/tuning-es/tuning-russia.

Chapter 5

Designing a degree programme

Ivan DYUKAREV, Evgeniya KARAVAEVA and *Artur DEMCHUK*

5.1. Introduction

At the beginning of this chapter it is necessary to clarify that Tuning is not and will never be a set of rules, but rather a search for innovation, inspiration, new answers and dynamic quality. However, while discussing in the groups the Tuning experts have occasionally come to a number of advises which they have found useful. They are checking points which may be useful to read and implement or simply to read and ignore because the learning process requires something different. This compilation has specifically been asked and put together for the Russian Tuning members since these were points discussed and found of help. The Russian Tuning Groups have themselves shown great capacity for creativity and fresh thinking. They wanted to collect these practical comments as starting points from where to develop and build the new system and to launch on the creative act which is or should be always the act, the work of education. In Tuning understanding of education, it is the learner who is at the centre and it is he or she who should give the measure of every structure created and at the heart of every rule.

5.2. Tuning tools

Tuning sees its particular role in providing tools for the designing and developing the degree programmes. This chapter is based mainly on the recommendations provided in "A Tuning Guide to Formulating Degree

Programme Profiles"[1], which have been adapted and partially realised during the Tuning Russia Project (see related examples of degree profile and programme design on the project Website[2]).

Study programmes which have been set up according to the Tuning methodology are output-oriented and, preferably, modularized. A modular system has the advantage of being transparent. It will promote and facilitate finding of a correct balance between learning outcomes and their related student workload expressed in ECTS credits. For Tuning the design of a programme is a decisive element for its quality and its relevance for society. Poorly designed programmes will not only have a negative effect on the output of the number of successful students and the average time to finish the programme, but also on the level of citizenship and employability of its graduates.

Tuning developed a step by step approach for designing a study programme[3]. This model identifies the following key elements:

- Necessary **resources** must be available.
- A **need** must be demonstrated and be established through a consultation process **of relevant stakeholders**.
- The **degree profile** must be well described in accordance with the **reference points and meta-profile**.
- A set of **desired learning outcomes** have to be identified and expressed **in terms of generic and subject specific competences**.
- **Academic content** (knowledge, understanding, skills) **and structure** (modules and credits) must be established and described.
- Appropriate **teaching, learning and assessment strategies** to achieve the desired learning outcomes must be identified.
- An appropriate **evaluation and quality assurance** and enhancement system focussing in particular on the consistency and implementation of the curriculum as a whole must be set up.

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[1] Jenneke Lokhoff, Bas Wegewijs, Katja Durkin, Robert Wagenaar, Julia González, Ann Katherine Isaacs, Luigi F. Donà dalle Rose and Mary Gobbi, eds. *A Tuning Guide to Formulating Degree Programme Profiles.* Bilbao, Groningen and The Hague: Bilbao: Deusto University Press, 2010.

[2] The Tuning Russia, http://www.tuningrussia.org/

[3] Gonzalez, J. and Wagenaar, R. (2008). *Universities contribution to Bologna Process.* Bilbao: University of Deusto, 2008.

A pre-condition for delivering a programme is the availability of **resources.** The quality of these resources directly affects the quality of the programme. Resources include the availability and quality of academic staff, supporting staff and, in the case of workplace learning, the workplace supervisors. The environmental conditions and facilities available for teaching and research are also relevant. Both require permanent monitoring and improvement. In the case of academic staff this means for example that opportunities are made available and promoted for making staff acquainted with new approaches to learning and teaching.

Designing study programmes and defining programme competences and learning outcomes require careful planning and teamwork by the responsible staff. In student centred or output oriented programmes all faculty staff who are involved in offering parts of the degree programme, have a shared responsibility for its outcomes and for conducting the units or modules of which the programme is constructed.

The first step in designing the degree programme is to determine whether the programme is needed by students and society, rather than whether there are academics eager to teach in it. Determining this will require a careful and objective consideration of such factors as the labour market, the development of the subject area, emerging technologies and the like.

To demonstrate **the need** for a degree programme a broad consultation process is required. This consultation process should not only include the academic community, but also professionals and professional bodies and employers and other stakeholders. To obtain useful information Tuning has developed a **set of questionnaires** focussing on generic as well as subject specific competences. The outcome of these questionnaires forms input for the definition of international **reference points**[4] for a subject area as it was explained in chapter 4.

Once the general area of the programme has been identified or decided, it will be helpful to consult the general reference points and the subject area specific references points that have been established for the academic or professional area. This will help in designing the degree programme that is defining the profile, identifying the related set of

[4] Tuning Russia Reference Points are available at the project website http://www.tuningrussia.org

competences to be developed and formulating the learning outcomes to be achieved.

In order to facilitate transparency and further the systems that prepare for recognition at the regional and international levels, Tuning members from different fields have developed the **meta-profiles**[5] for the area. These are groups´ representation of the structure and combination of competences which gives definition to a thematic area. They are referential elements and they are always mental constructions destined to reflect and analyze the possible and diverse real degree profiles. This is a step also meant to guide the development of new degrees.Samples of meta-profles were presented in chapter 4.

For each study programme there should be a **degree profile**[6] that clearly defines the aims and purposes of the programme. The Degree Profile is a very brief document, of around two pages, designed to convey the essential information about a specific degree programme. It locates the programme in the academic map of disciplines or thematic studies.

The Profile specifies the subject area or areas studied, identifies the level (first, second or third cycle) and indicates the special features that distinguish it from other similar programmes. The Degree Profile describes, in terms of competences and learning outcomes, what graduates will know, understand and be able to do by the time they have successfully completed the programme. The Profile spells out what can be expected of the graduates in terms of the kinds of tasks they are equipped to undertake, their level of expertise and the responsibilities they can assume.

Each Profile is based on a set of Key Competences to be developed by the learner in the framework of the degree programme. The exact mix of competences will differ in different degree programmes, even in the same academic or professional area. The **Key Programme Competences,** to be included in the Degree Profile, should be the most important ones that the graduate will have achieved as a result of the specific programme. It should be expected that most Programme Competences will be comparable as between, say, two first cycle programmes in different HEIs in the same subject area. However there might also be differences given the fact that

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[5] Meta-profiles are included in the related Reference Points, http://www.tuningrussia.org

[6] Examples of the degree profiles are available at http://www.tuningrussia.org

each institution makes its own choices based on its mission and available means.

Developing the key competences is the main objective of a programme. These competences are called Programme Competences (PCs) because they are the cornerstones of a programme. Their achievement is verified through reference to Programme Learning Outcomes (PLOs). The purpose of learning outcomes is to describe accurately the verifiable learning achievements of a student at a given point in time, for example at the end of a degree-course, study module or a period of learning in the workplace. A crucial feature of the Degree Profile is that it expresses the **Programme Learning Outcomes.** These are statements of what the graduate of the Programme demonstrably knows, understands and is capable of doing when s/he has successfully completed the Degree Programme. They should be formulated in a manner consistent with the statements of learning outcomes of the several course units/modules offered in the Degree Programme.

Further step is formulating **intended learning outcomes** of the individual units, expressed **in terms of the subject-specific and generic competences** to be achieved. Curriculum design and student assessment should be coherent with degree profile. The learning outcomes of the individual units should, together, result in the level of competences to be obtained by the learner, to be verified by the overall learning outcomes. Programmes clearly show progression regarding the level of competences to be obtained and hence the learning outcomes to be achieved. As a consequence, the learning outcomes of units/modules which develop the competences at the highest level should precisely match the Programme Learning Outcomes.

The **curriculum design**[7] process should consider the **academic content** and level to be reached but it should also consider that one major goal in higher education is to promote autonomous learning and autonomous learners —which has implications for **teaching and learning methods** and the overall student workload in terms of **ECTS credits**[8]. The curriculum should not overload students with excessive and redundant content. Curriculum design should consider the employability of graduates and

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[7] Examples of the curriculum design are available at http://www.tuningrussia.org

[8] Results of Tuning Russia Students' Workload Survey are available at http://www.tuningrussia.org

the development of citizenship as well as their academic and intellectual training.

According to the Tuning methodology all units are —in one way or another— related to each other. This not only applies to the units or modules which are part of the major or core part of the programme, but also to minor course units and electives. In a well designed programme, minors and electives should strengthen the profile of the programme while giving learners the ability to 'custom fit' the programme to their needs.

In defining new degree programmes and improving existing ones the following '10 steps' process may be helpful.

5.3. Ten steps for designing new programmes (or improving existing ones)

1. Determine need and potential

- Consult stakeholders (potential students, academics, employers) to verify that the degree is needed.
- Decide whether the programme proposed satisfies the established or new professional and social demands.

2. Define the profile and the key competences

- Identify the main discipline(s) / subject area(s) which form the basis of the degree programme
- Identify the relationship of the degree programme with the other programmes in the area, describe profile in accordance with the Meta-Profile of the area
- Specify whether the focus of the degree programme is to be general and/or specialist.
- Decide on the orientation of the degree programme.
- Identify and describe the potential fields / sectors where its graduates may find employment.
- Identify and describe its contribution to developing citizenship and personal culture.
- Identify the Key Programme Competences in a detail form (in accordance with the Meta-Profile of the area).

3. *Formulate the Programme Learning Outcomes*

- Formulate the Programme Learning Outcomes related to the identified Key Programme Competences (up to 15 to 20).

4. *Decide whether to 'modularise' or not*

- Decide whether each course unit should carry a set number (e.g. 3 or its multiples) or carry a random number based on the foreseen workload.
- Allocate ECTS credits to each course unit[9].

5. *Identify competences and formulate learning outcomes for each module*

- Select the generic and subject specific competences to be formed or enhanced in each module on the basis of the Key Programme Competences identified under step 3.
- Formulate the learning outcomes for each competence to be developed in the course unit.

6. *Determine the approaches to teaching, learning and assessment*

- Decide how the competences can best be (further) developed and assessed, to achieve the intended learning outcomes.
- Foresee a variety of approaches to learning, teaching and assessment.

7. *Check whether the key generic and subject specific competences are covered*

- Check progression paths of the identified key generic and subject specific competences.
- Check whether all programme key generic and subject specific competences are covered by the modules/course units.

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[9] Examples of the modules and ECTS credits allocation are available at http://www.tuningrussia.org

8. Describe the programme and the course units

- Prepare a programme description and course unit descriptions on the basis of the profile, key Programme Competences, Programme Learning Outcomes, allocation of credits and the identified teaching, learning and assessment approaches.

9. Check balance and feasibility

- Check whether the completed programme is balanced in terms of the effort it requires and the competences to be achieved.
- Check whether the credits have been allocated on sound principles and that the students can complete the individual units and the whole programme within the allotted time.

10. Implement, monitor and improve

- Implement the degree programme and its components according to a clear structure and transparent implementation plan.
- Monitor the degree programme and its components by making use of both student and staff questionnaires to evaluate teaching, learning and assessment, as well as output information in terms of success rates
- Use a feed back and feed forward system to analyse the outcomes of the evaluations and expected developments in the field with respect to society as well as to academia.
- Use the information collected to enhance the degree programme and its components.

To sum up, these are some agreements and practical findings which could be of help in the development of new or the redesigning of former degrees. They may facilitate comparison and these tools can be reference points used by institutions and there staff everywhere to help with programme management in the context of reform. But, of course, there are other elements to be taken into consideration. Quality is seriously affected by other issues linked with institutional, national and international contexts. However, the emphasis in a learner- centered education gives a very limited consideration to tools, rules and institutional systems whose value depends on a wise understanding of how they can enhance the capacity and the educational experience.

Chapter 6

Conclusions

Julia GONZALEZ, Robert WAGENAAR, Pablo BENEITONE and *Ivan DYUKAREV*

6.1. Enhancing Graduate Employability

Stocktaking reports for the Bologna Ministerial Conferences and studies by stakeholder organizations reveal that the impact of the introduction of the three-cycle system on the employability of graduates varies greatly according to the country, the sector of activity, etc. A diversified offer of programs seems to respond more accurately to the diverse needs of society in rapidly changing contexts. Latest research on the outcomes of education shows the direct relevance of education for the employment prospects of graduates. There is clearly a 'transition problem' between higher education and the labour market, as quite often young persons with higher education qualifications often take up jobs not usually requiring such a qualification[1].

Today's graduates need to combine transversal, multidisciplinary and innovation skills and competences with up-to-date subject-specific knowledge so as to be able to contribute to the wider needs of society and the labour market. Bucharest Communiqué[2] stated that... "To consolidate the EHEA, meaningful implementation of learning outcomes is needed. The development, understanding and practical use of learning

[1] The European Higher Education Area in 2012: Bologna Process Implementation Report, EACEA, 2012

[2] EHEA Ministerial Conference 2012 and Third Bologna Policy Forum, Bucharest, 27 April 2012

outcomes is crucial to the success of ECTS, the Diploma Supplement, recognition, qualifications frameworks and quality assurance – all of which are interdependent. We call on institutions to further link study credits with both learning outcomes and student workload, and to include the attainment of learning outcomes in assessment procedures. We will work to ensure that the ECTS Users' Guide fully reflects the state of on-going work on learning outcomes and recognition of prior learning".

The Bologna Declaration establishes "a system of easily readable and comparable degrees" and the Diploma Supplement as policy tools that aim "to promote European citizens employability and the international competitiveness of the European higher education system". The London Communiqué adds "accessible information" and qualifications frameworks to the policy tools that aim to increase mobility and the "attractiveness and competitiveness" of the European Higher Education Area.

From the very beginning, the Tuning has been designed to understand curricula and to make them comparable, compatible and transparent. Consisting of the methodology to design, develop, implement and evaluate study programmes for each of the Bologna cycles, Tuning serves as a platform for developing reference points at subject area level and academic evidence for informed policy making in higher education management.

6.2. Application at the Local Level

Tuning, as a process, and Tuning Russia as a project, drive towards producing the reference points and the programme degree profiles, which explicitly articulate what students should know and be able to do by the end of a degree track. The programme degree profile has the potential to inform both students and prospective employers, but few benefits can be reaped unless the Tuning efforts inform academic staff practice.

It is worth observing that the programme degree profile, a document that offers a portrait of what a programme looks like, is drafted before any real application of Tuning in a department and/or university. The point here is that application aims at helping academics in a given university be more aware of its own collective identity as expressed in the curriculum that defines it - and that it defines. The programme degree profile, therefore, will ideally be the starting point for a process of application at university/ department level, since it combines the competences and outcomes alongside the departmental portrait.

The programme degree profile serves as part of a recursive process of Tuning, in which academic staff members engage (as they already do) in a process of curriculum evaluation and revision. What might in some instances make the application of Tuning different is the inclusion of the core competences and outcomes.

As part of Tuning, work groups solicit input or feedback from the employers to whom they send or to whom they might send their graduates. If part of the educational mission is to equip students with the knowledge and abilities to embark on successful careers, then the contact made with potential employers may lead to experiential learning opportunities for some students.

Creating these opportunities for students requires continued partnering with the potential employers as well as consideration within the department of how the internship fits the curriculum. For example, what sort of response will the interning student be asked to make regarding the experience? How will the interning student's experience be supported within the academic department? These sorts of questions need to be addressed to assure that students maximize the learning potential of the internship.

6.3. Working Collectively - Tuning Centres

Tuning, by its very nature, creates collaboration. Taking Tuning home opens the opportunity for a department to take stock of itself, to think and talk about how its particular configuration provides students with the knowledge and skills that the academic staff strives to impart, and that students can apply at the next academic level or in the workplace.

Although a lot has been accomplished in the Tuning Russia project already, it is obvious that much work still has to be done. In the first place it is necessary to disseminate the outcomes through different channels of which this book is one. Secondly, more in-depth studies are still required as well as testing of the present results in other subject areas, which is the one of the first aims of Tuning Centres.

To conclude this book the following overall conclusions can be drawn regarding Tuning Russia:

- Russian universities have taken their full responsibility in the Bologna process by initiating the Tuning Russia project.

- Tuning Russia shows that groups of academic experts working in a European context can establish reference points for the two or three cycles in their subject areas.
- Common reference points can be identified using an approach based on subject related and generic competences.
- The application of Tuning techniques can be vital for the joining the European higher education area.
- A process of adjusting to Bologna indications is under way: Tuning gives a co-ordinated context for collaboration.

Although conclusions are important, it is more relevant that these are followed-up by concrete action. The network of Tuning Centres in Russia will necessarily be in a leadership role for this initiative, since their personnel has worked through the overall process and understand its aims most clearly. The process undertaken by the Tuning Centres staff provides a model for the sorts of work to be done towards implementation in the universities of Russian Federation.

Annexes

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