# Work Package 3 Consolidated Report

# Benchmark Analysis of Higher Education Sectors in Denmark, Lithuania, Romania, Scotland and Sweden

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# Executive Summary

This consolidated report is part of the Work Package 3 of the EUniAM project. The aim of this work package was to conduct a benchmark, comparative analysis of institutional university autonomy within and across EU project partner countries, namely: Denmark, Lithuania, Romania, Scotland and Sweden. This benchmark analysis was conducted by the Lead Task Force that collected and analysed secondary and primary data in each of these countries and produced four benchmark reports.

For each dimension of autonomy, the members of the team identified respective evaluation criteria and searched for similarities and differences in approaches to higher education sectors and respective autonomy regimes in these countries.

This report consolidates the process and key findings from these four benchmark reports. Specifically, it presents (i) the methodology and methods employed for data collection and data analysis; (ii) the comparative analysis of HE sectors and respective education systems in these countries; and (iii) the executive summaries of the benchmark reports and key emerging patterns.

The findings from these benchmark reports, together with the findings from the evaluation of existing situation of university institutional autonomy in Moldova (as part of Work Package 2 of the project), will contribute to the development of recommendations on how to enhance the institutional university autonomy in Moldova and to make the higher education sector effective and efficient, as well as competitive at the European and international levels (this being the aim of Work Package 4 of the project).

We would like to acknowledge warm welcome and invaluable inputs from the colleagues the EUniAM Lead Task Force team met during their visits to Denmark, Lithuania, Romania, Scotland, and Sweden. Without their firm support, this benchmark analysis would not have been that successful.

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# 1. INTRODUCTION

This report is part of the Work Package 3 of the EUniAM project. Its aim was to conduct a benchmark analysis of university institutional autonomy within and across EU partner countries, namely: Denmark, Lithuania, Romania, Scotland[1] and Sweden. For this purpose, a Lead Task Force team was formed (Table 1) that collected and analysed secondary and primary data in each of these countries and produced four benchmark reports (Appendix 1-4). To produce these reports (each being over 200 pages in length), the Lead Task Force team reviewed over 6,000 pages of data.

Table 1: Lead Task Force team

| Name | Affiliation | Responsibility |
|---|---|---|
| Larisa Bugaian | Vice-Rector Research, Technical University of Moldova | Team leader, consolidator |
| Angela Niculita | Vice rector, State University of Moldova | Organizational autonomy |
| Ala Cotelnic | Vice-Rector, Academy of Economic Studies | Financial autonomy |
| Daniela Pojar | Head of HR Department, State University 'Alecu Russo' | HR autonomy |
| Petru Todos | Vice-Rector, Technical University of Moldova | Academic autonomy |
| Romeo V. Turcan | Associate Professor, Aalborg University | Methodology, consolidator |

This report consolidates the process and the findings from the four benchmark reports. Specifically, it presents (i) the methodology and methods employed for data collection and data analysis; (ii) the comparative analysis of HE sectors and respective education systems in these countries; (iii) the executive summaries of the benchmark reports. Reflections on this benchmark exercise conclude this report.

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[1] Given that the institutional university autonomy in Scotland is closer to EU models, the Lead Task Force team, with the permission from the Agency, traveled to Scotland instead of England to collect data.

## 2. METHODOLOGY

### 2.1 Methodology framework

The framework of university institutional autonomy that was developed at the beginning of the project guided the process of data collection and analysis (Figure 1). The framework brings together, on one side, the traditional, as defined by Lisbon declaration, view of university autonomy that is based on four types of autonomy: organizational, financial, human resource, and academic, and, on the other, a new perspective that takes into account the dynamic and complex relationships a modern university has with its main stakeholders.

Figure 1: Institutional university autonomy framework
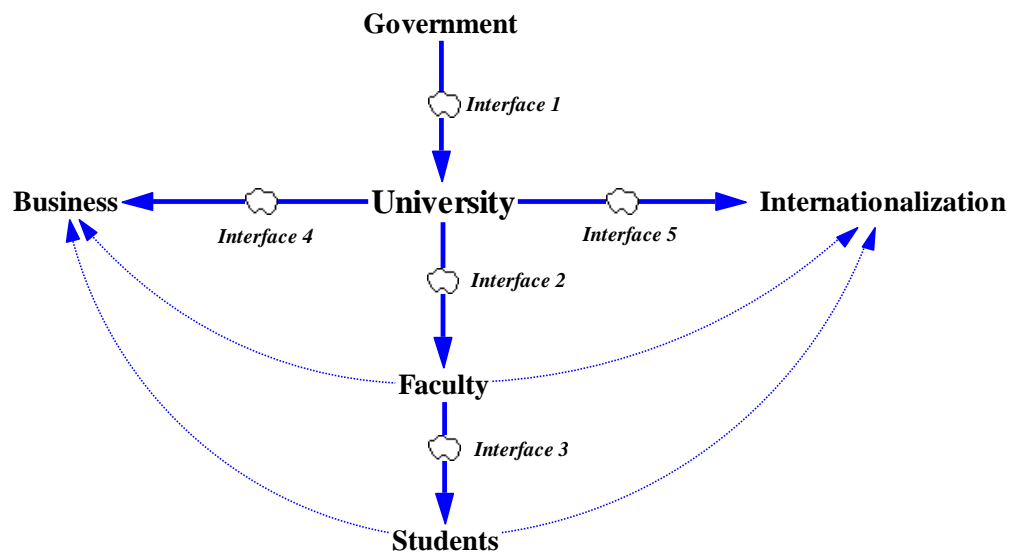


By cross-tabulating the 4 types of university autonomy and 5 university interfaces we arrived at a typology of university institutional autonomy, which was the basis for data collection and data analysis (Table 2). As it can be noticed, 20 types of institutional autonomy are defined by this framework. This holistic view of institutional autonomy of universities is based on an iterative relationship between the four autonomy dimensions and interfaces, without preconceived judgements on causal relationships and effects.

These relationships are depicted in the framework (Figure 1) as five interfaces that characterize external and internal points of interaction between modern universities and their key stakeholders. These interfaces are: government – university; university management – university staff; university staff – students; university – businesses; and university – internationalization.

Table 2: Typology of university institutional autonomy

| | Organization Autonomy | Financial Autonomy | Staffing Autonomy | Academic Autonomy |
|---|---|---|---|---|
| **Interface I** Government – University | | | | |
| **Interface II** Management – Staff | | | | |
| **Interface III** Staff – Students | | | | |
| **Interface IV** University – Businesses | | | | |
| **Interface V** University – Internationalization | | | | |

*Government – university interface* explores inter alia state policies towards higher-education; role of central and regional governments in issuing regulations for the structure of university governance; governance vs. management: are governance structures fit for purpose, effective, accountable (to whom); advocacy of higher education institutions; need and role of accreditation; models of financing research and teaching; accountability and public responsibility; implications for the mission of an university; understanding the interface vs. practicing the interface; role in the appointment or approval of senior staff; policy on admissions and curriculum; Quality Assurance; establishing appointments/posts, salary and promotion criteria.

*University management – university staff interface* explores inter alia governance and management models of a modern university; power sharing in strategic and operational decision making; implications of top-down, bottom-up or flat organization; incentive and evaluation mechanisms; external vs. internal appointment and promotion policies; staff mobility; research, teaching, and contribution to community vs. university mission; understanding the interface vs. practicing the interface; accountability and public responsibility.

*University staff – students interface* explores inter alia students' role in university governance and management, as well as in learning and teaching with the new learner centred paradigm and research processes; staff as teachers vs. staff as facilitators; changing the mind set about relations with students; models of student admissions (e.g., linked to overall higher-education state policies); students' evaluation models; students' mobility; problem based learning; understanding the interface vs. practicing the interface; accountability and public responsibility.

*University – businesses interface* explores inter alia businesses' role in university governance and management, as well as in teaching and research processes; models of knowledge transfer (e.g., financing, ownership, spin-outs, intellectual property rights) and knowledge sharing (e.g., staff exchange programs, student internships, promoting entrepreneurship); career development, and innovation; life-long learning; role in work placements and work based learning; understanding the interface vs. practicing the interface; accountability and public responsibility.

*University – internationalization interface* explores inter alia university internationalization policies; university strategies for internationalization; staff and student mobility; in-ward and out-ward internationalization modes and models; partnership models and their implication for accreditation related to the process of internationalization; compatibility of internationalization and university autonomy; internationalization and university mission; understanding the interface vs. practicing the interface; accountability and public responsibility.

## 2.2 Data collection

To collect primary and secondary data, the Lead Task Force team visited Lithuania, Scotland, Sweden and Denmark between January and March of 2014 (Table 3); data collection on HE in Romania was based on a desk-top research with inputs from the project partner in Romania, University of Suceava Stefan cel Mare. During each visit, the team met with university management and faculty members, with representatives from the Ministry of Education, research, funding and quality assurance agencies, rectors' council, students and labour unions; the agendas for each visit are presented in Appendix 5-8.

Table 3: Visiting Missions to the EU Partner Countries

| EU Partner Country | Period | Hosting Institution | Partner representative |
|---|---|---|---|
| Lithuania | Jan 20-24, 2014 | Mykolas Romeris University | Birute Mikulskiene |
| Scotland | Feb 3-7, 2014 | Strathclyde University | Caroline Laurie |
| Sweden | Feb 17-21, 2014 | Royal Institute of Technology | Victor Kordas |
| Denmark | Mar 3-7, 2014 | Aalborg University | Romeo V. Turcan |

To facilitate the process of data collection and data analysis, data collection templates were developed that were common for each autonomy type and each EU partner country (Tables 4 and 5). The purpose of Table 4 was to (i) identify issues and questions related to various aspects of an autonomy type that could not be clarified from consulting open available sources of data, and (ii) suggest possible sources of data (meetings). Guidelines and examples

for each entry in Table 4 were developed. Based on this template, the Lead Task Force team used this template to prepare a list of problems, questions and issues following the review of data openly available on the Internet, and to suggest possible sources of data/meetings (please refer to Appendixes 1-4 in the Benchmark Reports).

Table 4: Identified issues and questions

| Problem formulation | Material consulted | Unresolved issue, question, gap | Suggested meetings |
|---|---|---|---|
| What are the generic/state and university specific rules in terms of university governance and management?  If there are variances across universities, why is that the case? | The Scottish Code of Good HE Governance  Use footnotes to record sources of information | State here what is unclear and what issues/questions need to be addressed | Step 1. Ask for additional material that is not available on-line or missed during search  Step 2. Suggest organization/function within organization whom you would like to meet and discuss these issues |

Table 5: Data reporting template

| Problem/question formulation | Findings | Memos |
|---|---|---|
| What are the generic/state and university specific rules in terms of university governance and management? | Record here what you found in the documents and from interviews (addressing the what, how who, when questions)  IMPORTANT: make sure you also always try to get to the route of the problem/question/issue by addressing the 'why' questions  Use footnotes to record sources of information | Please record here any of your ideas, concepts, relationships between/across the concepts/types, potential impact, potential implications for Moldovan system, etc. – it is IMPORTANT to record ALL your thoughts and ideas immediately as you report a finding. |

The filled in templates with problems, questions, issues and suggested meetings, were sent to our partners at least one month before the visit so that they could contact respective institutions and organize suggested meetings. At the same time, upon receiving these templates, our partners sent the templates to respective respondents asking them to address the questions and issues identified in the templates. In this way, during the meetings, the team

members and the respondents had focused and productive encounters. In many cases, the respondents also provided the feedback to the questions and issues raised in writing.

The purpose of Table 5 was to (i) bring together all the data collected by the team and (ii) start the process of data analysis. That is, data from Table 4 and data collected prior to each mission was put together in this table. Guidelines for data entry in Table 5 were developed. This process was done within a week after each visit. During this process, the Lead Task Force members wrote memos, reflecting on what they have learned during data collection process, focusing on concepts, types, interfaces and their relationships (please refer to Appendixes 5-8 in the Benchmark Reports).

## 2.3 Data analysis

Multiple-case study methodology was employed to analyse the data; each EU partner country is considered as a case. First, the Lead Task Force team conducted a within-case analysis of university institutional autonomy in the respective case country based on criteria, properties and indictors of autonomy types that emerged from the data (please refer to Benchmark Reports). Table 6 presents the template developed for the purpose of developing respective criteria and indicators; this template was common for all autonomy types (each column represents a context for a within-case analysis and is reported in a separate chapter in a benchmarking report).

Table 6: Template and guidelines for developing benchmark criteria, properties and indicators

| Lithuania | Scotland/UK | Sweden | Denmark | Romania |
|---|---|---|---|---|
| **Basic funding** | | | | |
| Define, conceptualize, describe, way it is implemented | | | | |
| Separate between government and university | | | | |
| Identify possible links and relationships with other criteria or autonomy types | | | | |
| Position within a university autonomy interface. | | | | |

A criterion for a type of autonomy was developed on the basis of the following indicators. Each criterion was defined, conceptualized, and described. A separation line between government and university was identified for each criterion. Possible links and relationships with other criteria or autonomy types were proposed. Each criteria were positioned (where possible) within a university autonomy interface.

The same emergent criteria and indicators were employed to conduct cross-case analysis as presented in the benchmarking template (Table 6). Memos were written during the within- and cross-case analysis, hence recording any ideas, concepts, relationships between the concepts/types, looking for common patterns and variances, as well as highlighting potential impact, potential implications for the Moldovan HE sector. A cross-case analysis is presented as a separate chapter in the respective benchmarking reports.

The Next step in data analysis was to look for common patterns and variations per each autonomy type and related criteria that emerged during the benchmark analysis performed in the above mentioned reports; for this purpose a data reduction template was developed as presented in Table 7. To develop a holistic understanding of the institutional autonomy, data were further analysed by cross-tabulating the autonomy types and university interfaces (see Table 2).

Table 7: Data reduction template

|  | Common Patterns | Variations |
| --- | --- | --- |
| Organizational Autonomy | | |
|     Criteria 1 | | |
|     Criteria 2 | | |
|     Criteria 3 | | |

# 3. BENCHMARKING CONTEXT

## 3.1 Introduction

In this Chapter we will discuss the context within which the benchmark analysis was conducted. Specifically, we are interested to understand the context within which university institutional autonomy is embedded in Denmark, Lithuania, Romania, Scotland and Sweden. For this purpose, (i) statistical data was analysed to generate an overview of the size and capacity of the higher education sectors in the partner countries; (ii) HE sectors in these countries were analysed to get a grasp e.g., of how they are structured, who the players are, and how they are related to each other; and (iii) education systems in these countries were analysed. First we present and discuss a number of statistics related to university institutional settings, followed by a discussion of structures of higher education sectors in the EU partner countries, and concluding with a discussion of the education systems in these countries.

## 3.2 Benchmarking context in numbers

Table 8 below summarises key indicators per country in relation to higher education sectors, such as countries' population, overall GDP and GDP per capita, higher education and research budget as percentage of GDP, number of higher education institutions, private higher education institutions, cycles of education, total number of students and the number of foreign students, number of students per cycle and number of academic staff.

Following the World Economic Forum Global Competitiveness Report (2014) classification of countries' stages of economic development, Romania is seen as an efficiency-driven economy, Lithuania is in transition from an efficiency-driven economy towards an innovation-driven economy, while Denmark, Sweden and Scotland are positioned as innovation-driven economies. It may be observed that the latter countries - Denmark, Sweden and Scotland - have the highest proportion of their GDP used for higher education. At the same time these countries allocate almost half of those funds towards research and development. When it comes to the number of universities (as defined as those with all 3 cycles, doing teaching and research) in these three countries per 1,000,000 population, a ratio of approx. 2 universities per 1,000,000 emerges.

All five of these countries follow the three cycles of higher education: first cycle (Bachelor's degree), second cycle (Master's degree) and third cycle (Doctoral studies). The duration of cycles varies: Sweden and Denmark have 3-year bachelor studies, while Lithuania and Scotland have 4-year bachelor (note: the 'ordinary' BSc degree is three years and the Honours is four years) and in Romania some bachelor degrees also require a 4-year education. In Sweden, there are many study programs which last for 5 years, for example programs in engineering. This means that at the point of application the prospective students apply for five years of study (Amft 2012). Master programs usually last two years, but in Scotland it is only one (12 month, calendar) year, and some programs in Sweden follow a one-year plan. The average duration of doctoral studies is four years.

Table 8: Benchmarking context in numbers (2013-2014)

| | Denmark | Lithuania | Romania | Scotland | Sweden |
|---|---|---|---|---|---|
| Population (000) | 5,655 | 2,956 | 19,942 | 5,313 | 9,593 |
| GDP (€, billion) | 249,234 | 34,601 | 142,822 | 170,000 | 420,088 |
| GDP per capita (€) | 44,320 | 11,510 | 7,036 | 30,954 | 44,763 |
| HE budget (% GDP; €, 000) | 2.40 | 1.26 | 1.00 | 3.40 | 2,03 |
| | 5,982 | 436 | 1,428 | 5,780 | 8,528 |
| Research budget (% GDP; €, 000) | 0.95 | 0.48 | 0.1 | 1.58 | 0.92 |
| | 2,368 | 166 | 142 | 2,686 | 3,865 |
| Number of universities, university colleges and professional academies | 8+7+9 | 22+24 | 125 | 19+25 | 17+17+13 |
| of which private | 0 | 18 | 37 (only 20 accredited) | 0 | plus 16, of which 3 with 3 cycles |
| Number of universities per population (1,000,000) | 1.4 | 7.3 | 6.25 | 3.6 | 1.8 |
| Number of students | 275,000 | 175,066 | 705,333 | 174,916 | 463,530 |
| Cycle I | 136,745 | 122,414 | | 115,725 | 345,500 |
| Cycle II | 57,683 | 49,777 | 681,515 | 23,735 | |
| Cycle III | 8,915 | 2,875 | | | 3,424 |
| Number of international students | 29,708 | 3,200 | 19,404 | 48,000 | 50,078 |
| Number of faculty | 17,884 | 13,923 | 28,365 | 16,735 | 30, 831 |
| Cycles (years) | | | | | |
| BSc | 3 | 4 | 3/4 | 4 | 3 |
| MSc | 2 | 1.5/2 | 2 | 1 | 1/2 |
| PhD | 3 | 4 | 3/4 | 3 | 2/4 |

The number of students in these countries corresponds to the size of the population: 275,000 in Denmark, 175,066 in Lithuania, 705,333 in Romania, 463,530 in Sweden, and 174,916 in Scotland (Eurostat 2014). The Number of international students varies significantly. Sweden is receiving the highest number of international students – 50,078 (almost 11% of overall student population), while in Romania international students make only about 3%. The number of academic staff is quite evenly distributed through the countries, Romania being an outlier with only 28,365 academic staff for 705,333 student population, while Sweden, for example, employs 30,831 for 463,530 students.

**3.3 Higher Education Sector Structures**

Appendices 9-13 depict the structures of Higher Education sectors in Denmark, Lithuania, Romania, Scotland and Sweden. A number of common patterns emerge following the analysis of these sectors. Research and teaching are inseparable parts of universities' mission and vision. The role of Academies of Science (except Romania) is rather to strengthen and promote academic (research and teaching) activities. At political/policy level, the trend is to have a Parliament as a founder of universities. The scope of intervention from the Ministry of Education in these countries varies from country to country, with no evidence of 'true' autonomy. In Denmark, the Ministry intervenes both at the strategic and the operational level. The recent (2014) intervention on the 'scoping' (optimizing) of intake at both cycles is an example of strategic intervention. At times the Ministry in Denmark uses "directives" and at other times, decisions and policy that are negotiable. Thus, if we shall give a name to the Government-university interface or autonomy, it could be "negotiable autonomy".

The tendency in the benchmarked countries is for Ministries of Education to be small, and because of that considerable authority is delegated to agencies. The Lithuanian HE system shows many similarities with the Scandinavian models, the Scottish system is also characterized by considerable simplicity and efficiency.

At the operational level, a Ministry of Education is the main player that coordinates all research and innovation policies and public funding. There are a number of independent agencies (founded by a Ministry of Education) that perform functions of funding bodies for teaching and research (applied/fundamental or strategic/independent) of quality assurance. The operational structure varies significantly between the countries. In the Danish, Swedish and Lithuanian higher education sector, the operational level is represented by a range of Government Agencies (Danish Agency for Science, Technology and Innovation (DK), Swedish Council for Higher Education and Swedish Higher Education Authority; five Main Agencies in Lithuania), that are responsible for the routine work of government administration, giving advice to the Minister about technology and innovation policy and distributing public funds for various types of research and funding of research and innovation. Some entities, which have a status of an Agency, are called "Councils" or "Centres". One can see a division of academic and industrial research functions at ministerial level in some cases; but in others - a close cooperation between them. Lithuania and Sweden demonstrate a dual ministry model, with a division between the Ministries of Education and Research, dealing with research and innovation in the academic sector, and the Ministry of Industry (in Sweden), or Ministry of Economy (in Lithuania), dealing with research and innovation in the private sector, through their respective agencies. Denmark and Scotland realize their innovation strategy through collaboration between the ministry of education and such Ministries as department of health, ministry of business and growth, ministry of defence, department of environment, food and rural affairs.

In Scotland, the Minister for Enterprise, Transport, and Lifelong learning is directly responsible to the Scottish Parliament for the overall higher educational policy development. The policy is administered by the Scottish Executive Enterprise, Transport and Lifelong Learning Department. Funding of higher education and research is exercised through the Scottish Funding Councils, consisting of the Scottish Further Education Funding Council (responsible for teaching a some research in 46 further education colleges) and the Scottish Higher Education Funding Council (responsible for funding teaching and research in 22 Scottish higher education institutions).[2]

The operational level of the Romanian higher education sector is represented by a multitude of actors, where separate bodies are responsible for the distribution of research funding, advisory funding and policy making. The key player is the Ministry of Education, Research, Youth and Sport and its National Authority for Scientific Research. Besides, there are a number of Consultative, Funding bodies, and other governmental and Coordinating agencies involved in innovation. The Romanian Academy of Science is responsible for coordinating scientific development through a number of research institutes and centres in different areas of knowledge (facilitating networking and stimulating research). The higher education and research sector in Romania controls public R&D organizations and educational institutions, which are the main research performers in the country, since R&D in the private sector is limited.

### 3.4 Education Systems

The education systems in the countries in focus are usually structured around the seven major levels identified by the international Standard Classification of Education (UNESCO, 1995): ISCED 0 pre-primary education, ISCED 1 primary education, ISCED 2 lower-secondary education, ISCED 3 upper secondary education, ISCED 4 post-secondary education, ISCED 5 tertiary education (including two types: type A for tertiary programs with an academic orientation and type B for tertiary programs with a vocational or professional orientation), ISCED 6 – level of doctoral studies.

Countries' education institutions can be state and non-state (municipal, private or other). The compulsory level of education usually corresponds to the ISCED 2 level – lower secondary education until the age of 14-16. Compulsory schooling starts in the academic year after the child turns five (Scotland), six (Denmark) or seven (Sweden, Romania, Lithuania) years of age. On the parent's request the age of entry can be lowered.

In this analysis we primarily focus on the system of upper secondary education and the transition into the system of post-secondary/tertiary education. Appendices 14-18 contain the structures of the education systems in the countries in focus. Our primary interest is in the common features and peculiarities of the structures, we do not aim to describe them one by one in detail.

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[2] It is important to emphasize here the fact that the UK Research Councils fund project research in Scottish Universities.

The system of upper secondary education gives access to post-secondary and tertiary education or to the labour market. It is generally represented by high schools and vocational schools. High schools (gymnasium level) provide academically oriented upper-secondary general education that directly leads to application for entrance to universities. Vocational types of schools either facilitate early access to the labour market or provide access to post-secondary education with occupational orientation. Vocational programs last from one to two years; their purpose is to assist a person in the acquisition, change or upgrading of his/her qualification and preparation for participation in the changing labour market. However, having passed an exam confirming their upper secondary level of education in Denmark, Sweden, Scotland and Lithuania, students at vocational schools can also access academic university education.

The upper secondary level of education is completed by a number of school leaving exams that qualify students for admission to higher education in Denmark, Sweden, Scotland and Lithuania. All students taking either academic or occupation-oriented upper secondary education are entitled to pass examinations at this level, because it gives a certificate of upper secondary education.

Romanian students have to pass the National Baccalaureate Exam in a number of subjects, depending on the type of secondary education (in humanities or sciences) taken. After passing these exams, a student gets a certificate of secondary education, which is necessary for entering tertiary level. However, the results of these examinations usually cannot be used for entering higher educational institutions since these institutions have their own admission exams.

Post-secondary/Tertiary level of education is usually represented by three types of institutions: Universities, University Colleges and Vocational higher education schools providing professional degrees and qualifications. University education in the countries in focus are aligned to the European Higher Education Area, that support the Bologna's Process objectives of ensuring more comparable, compatible and coherent systems of higher education in Europe. In 2006 the Framework for Higher Education Qualifications in Scotland was verified as being compatible with the European Higher Education Framework (www.qaa.ac.uk).

Tertiary education in all these countries can be generally divided into three major levels: First cycle programs (Bachelor's degree), second cycle programs (Master's degree), and third cycle (Doctorate level, e.g., PhD degree). As has been noted in the introduction, the university programs differ in the duration of studies. Undergraduate degrees range from three years (Sweden, Denmark) to four (Lithuania, Scotland, Romania), Master studies take one (Scotland) to two years (Denmark, Romania), in Lithuania and Sweden the length depends on the academic program. Doctorate studies take from three to four years of full-time work.

University colleges grant degrees with a more practical professional orientation. The studies there usually last for three years and the degree awarded in the most of accredited institutions is equivalent to a university Bachelor's degree.

At the post-secondary level vocational education is typically provided by an institute of technology, university, or by a local community college. Vocational Education is often referred as technical education giving procedural knowledge not being supported by a lot of theory and conceptual knowledge. This type of education prepares people for specific trades, crafts and careers at various levels from a trade, a craft, technician, or a professional position in engineering, accountancy, nursing, medicine, pharmacy, law. There are also a variety of short-term vocational programs, lasting from several months to one year, which qualify students for particular occupations, or become a supplement to the already acquired education and enhance employability.

Vocational education does not fall under the traditional definition of higher education, however, the borders between them are becoming more and more blurred as the labour market is demanding a more highly skilled and qualified workforce, so the level of this type of education is continuously growing. Sweden is an example of the most unified system of the post-secondary education among the studied cases. The reform in 1991 intended to decrease the discrepancy between academic and vocational upper secondary school programs, and reduce the socially uneven recruitment into higher education (Halldén 2008). One of the most important implications of the reform was that all two-year upper secondary school programs were turned into three-year programs with emphasis on more general education and granting the possibility to proceed to higher education. By contrast, in Romania post-secondary education is delivered solely by universities. Vocational educational institutions are referred to as post-secondary non-tertiary education (EC 2013) and students on a vocational track cannot get admitted to a university due to the difference in qualification between exams passed in academic and vocational institutions. In Lithuania, vocational programs at the level of post-secondary education are not provided by the system of tertiary education. However, unlike in Romania, in Lithuania alongside universities there are also colleges at the level of tertiary education.

Most of the countries also support life-long education initiatives that open access to formal and recognise experience and learning in other settings both formal and non-formal post-secondary education to people aged between 25 and 64 years old who achieved upper secondary education. The separate courses are provided by universities, colleges and other types of schools.

In such a way, tertiary level of education is represented by two major directions: academic and vocational. Both of them open full access to the labour market. In Scandinavian countries, as well as in Lithuania and Scotland, these two types are not directly rated as one above each other, and in Sweden they are even explicitly placed at the same level. It is the future area of expertise that makes the students to choose between the options. This is becoming a general tendency at the level of tertiary education in the western world. However, Romanian tertiary education is still dominated by universities as practically the sole actors. Vocational training is put at the upper secondary level and the qualifications it gives are not viewed as very high.

## 4. SUMMARIES OF BENCHMARK ANALYSES

### 4.1 Organizational Autonomy

This report aims to compare organizational autonomy, the level and way of its regulation in universities from European Union member countries, partners in the project: Denmark, Lithuania, Scotland, Sweden and Romania. To achieve the objective of this study, we started from the identification of criteria that would characterize all aspects of organizational autonomy of universities. Following the methodology developed, first, there were collected and analysed data derived from laws and other normative acts regulating components of organizational autonomy in higher education institutions, statutes and other institutional acts of universities in EU, partners in the project. The next step, to form a clear and comprehensive view of national trends, scope and constraints on institutional autonomy visits were made study to EU partner universities.

Analysis of data collected, along with all the existing differences, reveals a number of common trends in terms of organizational autonomy of universities in higher education systems investigated. Thus, it was found that in almost all countries partner in the project there are external regulations, which provide a framework for organizational autonomy of universities, but the number and degree of detail of these regulations varies significantly, in most cases being only guidelines. Another important aspect is the inclusion of external members (outside the institution) in governing bodies of universities. In four of five higher education systems analysed, universities have a governing body - University Board - where the majority is made up of external members, practitioners in real sector of economy and business, and in some countries representatives from education, science or culture. This body is responsible for long-term strategic development of the university.

In some systems, universities are free to appoint external members in their governing bodies, in others they are designated by an external authority, upon the proposal of universities. In three higher education systems, the Senate is the governing body of the university. In the dual system of government (Lithuania and Scotland) the Senate is responsible for the university's academic issues (programs of study and research, promoting teaching and research staff, conferring scientific degrees,), and in the unitary system of government (Romania) it is the governing body which makes strategic decisions on the development of the university, and also manages the academic activity of the institution.

University senates, where they exist, represent the academic community of the institution, with members elected from among academic staff, technical staff and students of the university. Except Romania, universities in the other benchmarked countries have the freedom to decide for themselves on their organizational structure and, within the limits of the legal framework, on the establishment of legal entities.

The experience from visited countries shows that better governance of HEIs is provided by the governing bodies with a small number of members, among which external members form the majority. Usually, external members are representatives of the management of business environment, industry, local government and practitioners from various fields. They

contribute to a more efficient management of the university, particularly in terms of its organization, finance, property and institutional investment

In all higher education systems, the rector is the main executive authority of the university who ensures daily management of the institution and the achievement of the objectives set by the governing body of the university. The process for the appointment of rector appointment varies: by the university governing body based on a public competition (Lithuania, Denmark) or based on own procedure (Scotland); designation by the government on the proposal of the governing body of the university (Sweden); election by the entire university community (Romania).

Virtually all higher education systems have to ensure student representation in institutional governance bodies and their participation in decision making at all levels. In Danish universities students have a major contribution in the management of the educational process, with 50% representation in the respective bodies of university management. It should be noted that the degree of interest and involvement of students in decision making is different in universities. However, in those higher education institutions where students actively participate in the decision making process their input generally is constructive and contributes to a better governance of universities.

It was interesting to observe that adopting corporate type of leadership contributed to a wider autonomy in the universities management and in the determination of their internal structure. Rector (as Chief Executive Officer of university), accountable to the governing body, is selected with the participation of the academic staff of the institution, which ensures support of the academic community in implementing the strategic plan developed. Employment of academic environment representatives in management positions under a public competition, including at international level, allows selection of the most qualified candidates, ensuring a more efficient management of universities.

## 4.2 Financial Autonomy

The comparative analysis (benchmarking) made with respect to financial autonomy at universities in 5 countries - Lithuania, Scotland, Sweden, Denmark and Romania - has allowed us to highlight some similarities, but also some peculiarities of the manifestation of financial autonomy in individual countries. After studying the legislative acts in the respective countries, some normative acts of Universities, and the existing literature in this area, we established criteria and sub-criteria under which this analysis was performed.

Thus, we found that in all five countries surveyed higher education funding is made from two basic sources: public and private. The ratio between these sources varies. Funding from the state budget in the analysed countries is based on different approaches: in Lithuania public funds are allocated based on global grant, which is divided between different categories of expenditure. In this context, we note, that the university has the freedom to decide where to spend the respective amounts. In other countries (Scotland, Sweden, Denmark and Romania)

financing shall take the form of block grants. Both forms are conducted on two funding lines: teaching and research.

The financing of studies is performed based on different criteria: in Lithuania - the number of physical students (voucher system); in Scotland - number of equivalent students (FTE). In Sweden, there are considered both physical students (in the extent of 40%), and their performance by FTE students in the extent of 60%. Denmark considers only the students who have performance. Romania - equivalent students. Research financing in all 5 countries is based on the dual system, which means that part of the expenses are covered by the state and are included either in the amount of the voucher (Lithuania) or basic funding (Scotland, Romania, Denmark) and are intended to cover some operational and maintenance costs of the infrastructure needed for research. The second part is allocated on a competitive basis to projects by the responsible bodies in each country.

Each country has its own methodology for allocating financial resources to universities. It is obvious that some elements are common, others specific to each state. Thus, in Lithuania the allocation of budgetary resources is made based on the principle "money follows the student". Money from the budget, through Vouchers, goes to those universities that are chosen by the students who came into their possession. In Scotland and Sweden allocations are being made, largely, based on allocations from previous years and depending on the budget available at the state level. In Scotland, the Scottish Funding Council concludes annually a memorandum with each university setting out the conditions. In Sweden the planning of amounts for a period of three years takes place, but with the concretization of this amount each year. Denmark has a system for allocating financial resources based on the outputs. The Ministry allocates resources based on the number of FTE and the cost of a student in the field for: teaching, basic research. Romania allocates resources to universities based on contracts concluded with the Ministry of National Education. There is a methodology, based on calculation formulas, which is reviewed annually.

In each of the five countries analysed there has been established historically their own methodology for calculating the cost (price) of training a student. Its name varies from country to country: Scotland – TRAC (note: TRAC was developed initially to determine casts for research overheads), Sweden, Denmark - Full Costing - but what is common relates to the inclusion in this cost (price) of all costs (direct and indirect) necessary to train a highly qualified specialist. In all countries there is a difference in the cost of training depending on the level of training (bachelor, master, doctorate), the form of education (full-time, part-time), but also the field of study. Therefore, it is determined a conventional field that serves as the basis for calculating other areas usually socio-humanities where the coefficient 1 is used and for the other areas - depending on complexity, each country has different coefficients.

Universities in the 5 countries also enjoy, along with funding from the state budget, funding from private sources. It differs from country to country, both the share of private sources and their structure; there are also large variations between HEIs within a country. Virtually, in every country there are legal provisions regarding private sources that may be attracted to higher education, and how to monitor their use. Private sources are used depending on the

strategy adopted by the university. Monitoring the use of resources is carried out by internal financial audits, but also by external financial audits performed by various control bodies, specific to each country, which verify the use of financial resources according to the destination determined in the university plans. So, the use of revenues from private sources is not specifically monitored and they are used according to the needs of the university and the strategy adopted.

With regard to the right to borrow money from the financial market, we found that in each of the five countries surveyed universities have this right, but with a certain limit to freedom. Thus, in Lithuania there is a general limit of the loan, set by the Act on the approval of financial indicators from the state budget and municipal budgets for that year. In Scotland the university may borrow money from banks only with the reasoning and with the consent of the Scottish Funding Council, taking into account the ration of borrowing and income. In Sweden universities can borrow money from the financial market, only from the bank specified (designated) by the responsible authority. In Denmark universities are allowed to borrow money from the financial market, though a number of restrictions exist, such as 'lack of collateral'. In Romania the legislation allows universities to borrow money.

Universities in all five countries analysed have freedom in determining the size of tuition fees. Even in the countries where there are no taxes for local students and those from the European Union (Scotland, Sweden, Denmark) universities set the size of fees for students from outside the EU, as well as for another category of students, such as those from MBA. The condition which is imposed in all these countries is that the fee takes into account all types of expenditure and is not less than the actual costs for training a student.

In all 5 countries the tuition fee policy for local citizens and those from the European Union is the same. For students coming from countries outside the European Union the university establishes the fee independently. It's usually higher than the tuition fee for the local students and the actual costs of training. In Romania, university senates can set the final size of the fees for foreigners, but not less than the amount set in the Government Ordinance.

It is interesting to compare the existing situation in these countries with respect to cash balances from the end of the year. For example, in Scotland, the Scottish Funding Council audits every three years the use by universities of financial resources aimed at teaching, and if it happens that during that period the number of students is smaller than originally planned, then the amount of funding will be reduced by that amount for the next period. Balances from own sources are kept by the university and can be transferred to the following year. For universities in Sweden, Denmark and Romania unused funds, regardless of their sourcing, remain at the university and can be reported from year to year. In Denmark there is one condition: the cumulative result of income-generating activities cannot be negative for four consecutive years.

When referring to the ownership right over buildings, we find that the situation in this respect is also different. Thus, the universities in Lithuania, Romania, and Denmark can be owners of buildings purchased from their own sources. Those purchased from public funds belong to

the state. In Sweden, the universities do not have ownership rights over buildings. They are renting premises from the State through a special state agency In Scotland the property is only under universities' management. In these situations the behaviour of universities in making investments in the development of infrastructure is different. Thus, only universities in Romania and Lithuania are interested in making investments in real estate. In other countries, these services are outsourced and universities are not involved in this process. In all the countries surveyed there are certain ways to support students. Performance scholarships and social scholarships are granted to students in Lithuania and Romania. In Lithuania students can obtain state-supported loans to cover their study costs, living expenses. In Scotland scholarships are awarded by an independent agency. In Scotland, Sweden and Denmark students benefit from grants and loans under certain conditions. Thus, in Denmark and Scotland loans should be repaid during 15 years after graduation, and in Sweden - during 25 years.

The financial autonomy of universities offers the possibility to manage financial resources and contribute to creating working and study conditions for students and academic staff. This allows the university to differentiate itself from other universities, creating premises to ensure excellence and its competitiveness.

Regarding the distribution of sources within the university in Lithuania it is performed in a centralized way by the administration, while in other countries (Scotland, Sweden, Denmark and Romania) - in a decentralized manner. In Scotland each department, each person has a special account. The faculty pays for the hours worked within the faculty. In Sweden the mechanism for allocating financial resources consists of 2 components – educational and research. Educational resources "follow" the student, stimulating in this way development of new attractive courses and/or improvement of the existing ones in order to attract more students internally. Research funding is allocated according to the projects in which academic staff is involved. Salary of each academic person is a sum of educational and research funding and the percentage of each portion varies from 0 to 100%. Many Danish universities apply the principle of funding under internal allocation of funds identical to that at the country level. The principle is: money follows the activities. In Romania budget funds are allocated to faculties and departments, depending on the number of students, the average annual cost per student, the compliance with quality indicators of the educational process and other criteria established by the Senate. It emerges universities have freedom in deciding the directions for financial resources use, as well as developing internal regulations which detail or reflect certain aspects of financial autonomy along increased responsibility for their entire performed activity, including quality assurance of education. Each country has accepted its model that is most appropriate for the country. Different components of this model are in constant development, so universities (also the state entirely) are looking for some optimizations.

At the same time, we have noticed different degree of autonomy of universities, and also for each separate criterion. Each university, when taking decisions within the boundaries of financial autonomy, is subject to certain risks. In this case, the importance of collective

decision, thorough analysis of the situation, and also the internal monitoring of the use of financial resources increases.

## 4.3 Human Resource Autonomy

The purpose of this study is to perform a comparative analysis of human resource autonomy in five European countries, whose experience and best practice will serve as the basis for drafting proposals to amend the existing legal framework in our country.[3] All dimensions of human resources autonomy are examined in the context in the five European countries by analysing a series of normative acts both university documents, as well as others, issued by external authorities.

To ensure clarity and comparability of results and to get a broader picture of national trends, the scope and constraints on institutional autonomy, in the third stage of the project study visits were made to EU project partner universities. The comparative study is developed based on the following criteria and sub-criteria which, in our opinion, characterize in a comprehensive way all aspects of human resource autonomy: (1) Freedom/capacity to decide on recruitment and employment procedures, incl., bodies responsible for recruitment and employment procedures; methods and procedures for recruitment and employment; approval/confirmation of recruitment/employment; types of employment and employment contracts; conditions for appointment to posts in higher education; academic career; staff of the institution; (2) Freedom of institutions to decide on promoting employees, incl., evaluation of employees; role of students in promoting teaching staff; academic mobility of academic staff and internationalization policies; rights and freedoms of academic staff; invited academic staff; awarding of honorary titles; (3) Freedom to decide on workload, including, structure of teaching/academic workload; work time; obligations of staff in higher education institutions; (4) Freedom of the university to decide on the payroll structure and system, including, wage structure; incentives; structures entitled with the right to fix wages; (5) Freedom to decide on the termination of employment contracts, including, reasons for termination of employment contracts specific to higher education institutions; termination of employment contracts of staff with managerial functions.

The analysis of the legal acts in the field from the five EU countries revealed some common points, but also some differences of the autonomy of human resources due to both the specificity of the applicable legal system, as well as economic and social conditions in each country. In Scandinavian countries - Sweden and Denmark, due to a well-developed social security system, a central role in achieving the autonomy of human resources is played by unions, which are a key factor influencing the implementation of all human resources autonomy criteria. Employees in higher education in these two countries are employees of the public sector, but, as in the remaining countries, their employment does not need to be

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[3] In the benchmark report we concentrate on academic staff only. But we do realize that autonomous institutions probably have more non-academic staff than academic and that the HR has to address their needs as well and this may produce conflictual relations. This however was outside the scope of this benchmark report.

confirmed by an external authority. In all countries, the rector or the principal (Scotland) is the employer who concludes employment contracts, but the selection of staff is conducted by peer structures, called committees for employment, assessing candidates with respect to their compliance with performance criteria established in the institution. Any vacancy shall be made public, both at national and international level, with the exception of Romania where the vacancy is announced in the Official Gazette. For appointment, minimum conditions are established by the state and the institutions are entitled to set their own conditions for access to academic career, according to their specificity. In Scotland, each HEI divides its staff into four major categories, so-called JOB FAMILIES. This classification provides assistance for the HEI to group together the jobs that have similar characteristics. This classification is a good support in career development, job description and further information about the position (including academic positions) and takes into account the institutional development and training needs. Also the pay scales are underpinned by the implementation of an institution wide job evaluation scheme (HERA – Higher Education Role Analysis), which harmonises a range of terms and conditions by removing unnecessary distinctions between the staff groups. The objective of the academic career in higher education institutions in the five countries is to recruit people who have obtained a PhD degree, to employ them in higher education institutions and to provide them opportunities for a lasting academic career development, both in teaching and research.

In all countries the employment is initially performed for a fixed period of time, subsequently, if the person meets the criteria set, an employment contract is concluded for an indefinite period. The autonomy of the institution is manifested in the right of the institution to negotiate the employment contract and establish specific duration of contracts for those with a definite period. Except for Romania, the appointment of staff does not require approval from any external authority.

Career promotion[4] of personnel in the universities from the five countries is done according to the internal procedures of evaluation, with certain exceptions in Romania, where the National Education Act regulates these procedures. Promotion in a higher position shall be conducted on a competitive basis after prior verification. Similarly, evaluation of employees is part of the quality management system in force in each institution. It is critical to point out that academic staff also applies for higher level posts in other HEIs, i.e., there an active job market. At the same time, academic mobility has implications for the exercise of HR autonomy. Universities need to be aware of best practice conditions and salary levels in other competitive institutions.

The academic load of academic staff consists of teaching and research, as well as the activities of administrative nature. Remuneration in Denmark and Romania is dominated by the public sector payroll structure and involves limitations imposed by legislation. In Sweden and Scotland, institutions have full autonomy regarding the payroll structure. As for Lithuania, here remuneration is not subject to legislation in the public sector, but there are

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[4] There is a need to distinguish between "promotions" and "recruiting". In Denmark, there are no promotion possibilities. You can only move from one level to another by competition, which basically means you are recruited for the next level through a competitive process.

some limitations, and the institution must meet a minimum guaranteed by the state. The structures setting the wages are peer bodies. The establishment of those peer bodies responsible for academic staff salaries aims to increase the applicability of the transparency principle in the remuneration system. The fact that the payment for the academic activities includes not only teaching but also research activities confers attractiveness to academic career and can serve as an example of good practice for our country in the light of the new approach of the academic load structure and remuneration system for academic staff.

In the HE sector in all countries staff training is highly developed. The development of the academic staff starts from the early enrolment in doctoral studies. In Scotland, for example, the lecturer (note: the levels tend to be: lecturer, senior lecturer, reader, professor) is assisted for a long period (up to three years) by a mentor, selected among the experienced staff. From the first days of the employment for the new employed is established a probation period which aims to prepare and to develop the young academics. During this period the staff is not tested whether s/he corresponds or not to the position, but is trained for his/her academic career which contributes to professional development. Also it is an example of good practice that can be implemented in our country because it would help for the new employed staff to integrate into the academic community. In Scandinavian countries there`s no probation period, but each member of academic staff can benefit from the established professional development and training units that activates in the HEIs. The development and training of HE staff are part of institutional strategy.

The implementation of all those strategies including HR development strategies and the development of HR policies are done by well trained professional HR units in European autonomous institutions. The representatives from HR units participates in the peer bodies responsible for the remuneration system and for the employment and promotion of all kind of staff that activates in HEIs including in the peer bodies responsible for rector and vice rector`s selection. Also the representatives from HR units are responsible for introducing new member of Boards to the business of a university (not in Romania).

The employment contracts of staff in higher education institutions in all five countries may cease, as a rule, in connection with the expiration of employment or at the initiative of either party. Higher education institutions have well-developed policies and the grounds for termination are regulated under the general rules of labour law. Staff redundancies are present in all countries, but HEIs are obliged to respect the legal provisions in this matter: notice period and different kind of allowances that should be paid. Also, non-discrimination criteria should be basis for staff redundancies.

Following the analysis of those regulations of the higher education system in the visited countries there were drawn certain conclusions presented below. Ministries of these countries are bodies that develop personnel policies that should be considered and implemented by institutions, taking into account the principle of non- In four countries the legal frame established by the Government/Parliament involves a recommendation character: the state develops policies and HEI are free to implement according to their objectives and missions. At the same time, the ministries have an advisory role in the work of the institution. The

Ministry is an equal partner, not a supervisor and in no case is not a "higher court". Less can be said in Romania, where the role of the ministry is one of the main ones, coordinating and monitoring all activities related to personnel.

Competitions on employment are open and people fulfilling the conditions can participate in the contest, without discrimination, under the law, and the methodology of competition cannot contain discriminatory provisions on candidates based on gender, ethnic or social origin, nationality, religion, and disability, political opinion, social or economic conditions. Competition methodology cannot refer to seniority in service and cannot contain provisions that disadvantage candidates from outside the institution or from outside the country. The description of the vacant position will be made in comprehensive terms that correspond to the real needs of the higher education institution, taking into account not to limit artificially the number of potential candidates. All vacancies shall be made public. Similarly, no external authority approves the election of the rector (with the exception of Romania, where the rector is confirmed by the Minister of Education and concludes with the senate a management contract which provides managerial performance criteria and indicators, rights and obligations of the parties), HEI being absolutely autonomous in the realization of the right to recruit and elect the executive manager in all countries except Romania. HEI's Council is responsible for the termination of employment of staff with managerial functions. In Romania, HEI is not autonomous in this respect; the Rector can be also revoked by the relevant minister, under the law, after consultation with the University Senate - governing body elected by HEI staff.

Collaboration with business and other stakeholders in all universities visited is part of teaching and research activity. It is highlighted both by the fact that academic staff could be involved in industrial research as well, including supervision of industrial PhDs (note: this may differ from university to university). The mobility of academic staff to achieve teaching activities, but especially for research, is an important criterion in evaluating academics. Critical to this is the market for academic staff which has a significant impact especially in fields where there is a shortage.

The highlighting of similarities and differences across the five systems reveals that there is no perfect model of human resource autonomy, but there are good practices of universities with old traditions that if taken over and adjusted to the socio-economic realities of our country could give good results, would strengthen institutional capacities of higher education and would increase the autonomy of existing human resources management, correlating it with the principle of public accountability of each institution or: university autonomy means freedom with a high level of responsibility.

## 4.4 Academic Autonomy

Defining academic autonomy as the capacity of the university to make decisions regarding its vision, mission and academic profile, the introduction or elimination of study programs, choice of language for studies, designing the structure and content of programs, and issues

such as the admission of students or ways of ensuring quality of programs and awards, decision on the areas, scope, aims and methods of research have been highlighted in 10 criteria and 37 sub-criteria for the analysis of Academic Autonomy in five EU countries (Lithuania, Scotland, Sweden, Denmark and Romania). The criteria refer to: introduction and liquidation of study programs, admission to studies, recognition of studies, accreditation of study programs, National Qualifications Framework (NQF), organization of studies, employment of graduates, academic staff workload, scientific research and doctoral studies.

In this initial report academic autonomy in each of the countries named is analysed, in the light of these 10 criteria. Then a comparative analysis for all countries is done. On the foreground there are brought issues of government – university relations. Where appropriate, it is also revealed the relation between management - staff, staff - students, relations with the business world and some aspects of internationalization.

The Parliament and the Government decide on the establishment or liquidation of higher education and research institutions, approving / setting regulations, objectives, guidelines and resource allocation by domains. The Ministry of Education (under various names) is the authority responsible for education and research in higher education institutions; it is the body that decides on permitting the awarding of qualifications by these institutions A private higher education institutions may lose its license if it does not meet the quality standards (Romania, Lithuania).

Four types of higher education institutions can be found in the 5 countries: trade academies and colleges that offer professional undergraduate programs (short-term higher education, 2-3 years); universities that offer undergraduate and graduate scientific programs (graduate) and PhD; university institutes specializing in arts.  Institutions may be state / public or private. In the UK the word "university" in the name of the institution may be used only with the permission of the Privy Council. Private colleges, in order to have the right to bring foreign students to study, need to be accredited by the British Accreditation Council or the British Council and Accreditation Service for International Colleges. They grant the accreditation following the external evaluation of institutions.

The limited number of universities impresses (in Denmark, for example, there are only 8 for a population of 5 million. Universities are established by law or royal act. Colleges (professional) are more numerous and are established by the decision of ME.

Undergraduate programs have duration of 3-4 years (180-240 credits) depending on the profile and the degree obtained at the end (ex. Scotland, Romania). The Ministry of Education determines the general requirements for college study programs, the study programs for cycle 1, integrated studies and masters. New programs for college and undergraduate studies must correspond to the Nomenclature approved by ME. New programs are initiated at the request of the economic environment or when setting new scientific directions (Scotland, Denmark, Sweden). Institutions (the program team) develop the program in accordance with these requirements; they shall be approved by the academic

Board (University Senate), then go through an approval process for temporary operation until accreditation.

So, institutions are free to decide on the introduction or liquidation of study programs for cycle I, if they fulfil the rules set by the Ministry.

With regard to cycle II, professional and research masters are practiced with the duration of 60- 90-120 credits, depending on the duration and type of the first cycle. A single condition exists - the total duration of the first two cycles is not less than 300 ECTS. Other conditions are formulated by each university and are made public. The Ministry of Education provides the right (authorizes) to conduct masters and doctoral programs only to institutions that carry out research in this area. New master programs must demonstrate originality in application and advancement of knowledge.

New doctoral programs usually occur as a development of research programs. Institutions may grant a PhD in areas where they conduct research and they have established a doctoral school, either independently or in cooperation with other institutions approved by the ministerial order. The doctoral school must be accredited. The title of PhD is awarded to students who have successfully completed the PhD program and successfully defended the PhD thesis.

In all programs, studies are usually carried out in the national language. In parallel, programs can be set with the use of English, especially at the Masters and PhD at the institution's decision, aiming to attract foreign students to studies and enhance mutual mobility. For example, in Sweden all Master and PhD level programmes are taught in English, PhD thesis is also presented in English.

The Ministry of Education or other state bodies (Council for Higher Education in Sweden, Universities and Colleges Admissions Service in Scotland) coordinate centrally the application process to Bachelor programmes but each institution is responsible for selecting and admitting students – they are not allocated to an institution by external bodies. Typically, enrolment is done online. The student is free to choose programs and institutions in his/her priority order. In Sweden, the Government decides about the amount of funding for educational purposes per each institution; each HEI then decides about a number of students to be enrolled to each programme.

The Government approves the quota for admission to study programs depending on the capacity of university structures to ensure quality education. This capacity can be set in the accreditation process of the program or institution. In Romania, the Ministry of Education draws up a framework methodology each year and each higher education institution shall develop and apply its rules of organization of admission to the study programs offered.

For admission to master studies the contest is based on undergraduate degree obtained at related programs; graduates of colleges shall be admitted after one compensatory year. The specific requirements for admission to the MA and PhD are determined by university at the level of the study program. The Ministry of Education determines only general rules of

admission. Admission to the second cycle is the responsibility of the university, which determines its own admission methodologies.

Admission to PhD is based on the Regulation developed by the Research Committee, or a similar structure, which provides grants for PhD directly or through projects on a competitive basis. Admission to doctoral studies is based on master's degrees or integrated studies with 240 credits.

Admission of foreign students is carried out by university's admission committees. The Government influences in various ways quotas for the number of students admitted to the studies. A distinction is made between full time programme students and student exchange. Admission of foreign full programme students (global recruitment) to cycle I and II is done in selected areas and education is offered in English. The recruitment of exchange students within the EU is done by all five universities but in some countries with certain restrictions or financial penalties in case of large imbalances (e.g., in Denmark, the Government penalized the universities for imbalances in the in- and outward flow). Admission requirements for cycle I and II for foreign students are the same as for local students.

Universities are autonomous in the use of different methods of professional guidance. A special role in the fair and objective informing of students rests on centralized admission services (e.g., UCAS in the UK).

Quality assurance of university education and research is an obligation of each institution of higher education. At the national level, there are Quality Assurance Agencies that undertake and provide external evaluation and accreditation of study programmes and higher educational institutions based on clearly defined and transparent procedures and criteria established by the Agency in compliance with the European Standards and Guidelines. The efficiency of the institutional system of quality assurance is a special field in the external evaluation of study programs or institution as a whole. Higher education institutions have the right to provide education only for accredited programs. Study programs in the UK are subject to evaluation once every six years in order to assess if they meet quality standards (note: the review is more concentrated on the quality systems and does not involve evaluation or accreditation of programmes). For the external evaluation and accreditation of study programs a National Quality Assurance is established as an independent public body. The methodology, program external evaluation procedures and criteria of quality and relevance are developed, usually by the Agency and approved by order of the Minister of Education or Government decision. Evaluation is based on several fundamental criteria: the demand of the study program concerned on the labour market; the program is based on research and is in connection with an active environment for high quality research; internal continuous quality assurance of the program. There are subject to evaluation and accreditation also the branches of institutions abroad and subsidiaries of foreign institutions.

The experience of Great Britain is of great interest - evaluation criteria are described very explicitly in the UK Quality Code. Each quality criterion contains detailed instructions and explicit normative documentation the institution must have and present to evaluators. The

code is an integrated document that meets the basic requirements for all stages of life cycle of university training process. This Code is developed and maintained by the Quality Assurance Agency of UK.

Universities in some countries are free to choose, for the external evaluation, a Quality Assurance Agency from abroad that is listed in the European Register EQAR. The decision on accreditation remains with the Ministry of Education or another national authority empowered by ME.

A National Qualifications Authority (NQA) is a statutory body awarding and accrediting qualifications. NQA provides qualifications recorded with various types of certificates (for secondary education), diplomas and degrees related to higher education levels. Higher education qualification levels are described in terms of learning outcomes (descriptors) and in terms of credits.

National qualifications frameworks in the countries visited are compliant with EQF and comprise eight levels of qualifications, four of them relate to higher education: professional (5), Bachelor (6), Master (7), and PhD (8) levels. An exception is the QF of Scotland, which provides 12 levels of qualifications, but rules are provided for compatibility with EQF. NQA is under the auspices of the Ministry of Education / Government. NQA also coordinates the development and maintenance of the National Register of Qualifications in Higher Education. Including certificates and degrees / diplomas in the NQF Register is based on an assessment of learning outcomes that individual degrees / certificates document in relation to the NQF level descriptors. Higher education institutions are required to register in the Register the information regarding the skills they develop through their offer of study.

The qualifications descriptors for higher education, present in the NQF, are used as standards, quality criteria for the development, assessment and accreditation of study programs. In all 5 countries the European Credit Transfer System ECTS is used.

Higher education institutions are responsible for organizing the whole process of studies, design of study programs and courses, current and final assessment procedures. The entire content of study programs must correspond to the objectives and learning outcomes and competencies set out in the NQF that the student must possess at the end of studies. University study programs are designed by research initiative groups usually with good results.

For example, in the UK the design, approval and implementation of programs is carried out in accordance with standards established by the Quality Code, developed by the Agency for Quality Assurance in Higher Education of the UK, including a number of indicators of good practice on program operation, mechanisms that higher education service providers can base on to enhance the quality of the program put into action.

The final evaluation is an act of appreciation of the competencies acquired by the student in relation to the purpose prescribed by the program. Institutional normative acts define the defence procedures and requirements for the content of the paper.

The NQF of Romania, Denmark, Scotland clearly define the correspondence between the qualification levels of the Framework, educational documents to be issued, the type of education and professional training programs that can be acquired at the qualification levels and reference levels of the European Qualifications Framework (EQF).

Given that the rate of employment and career progression is a performance criterion of the study program and of the institution, efforts are made to facilitate this process at all levels, including national level. Program teams, departments keep records of their graduates' employment and career advancement. At the study stage, preparatory training to the employment process is organized.

The Labour Code of the countries examined sets a working week of 35-40 hours per week for academic staff. Institutions, independently, establish internal methodologies for calculating and allocating the teaching and research workload. It is noted that the core activities of universities consist of conducting research and research-based teaching.

In all countries considered, scientific research is an indispensable part of the process of training of specialists with higher education degree. Research is concentrated in thematic departments and is financed from the state budget and projects, and non-budgetary research grants. At the moment, in most universities non-budgetary grants together with the grants from international collaboration are comparable in size to the budgetary ones.

The university is autonomous in creating its own organizational structures and conducting scientific research: centres or laboratories, design units, consulting centres, university clinics, micro-production facilities, other manufacturing and transfer of knowledge and technology entities. To conduct research, a crucial role is played by the collaboration with businesses for the purpose of transfer of technology and innovations. There are also specialized research institutes combining research with the academic process.

Master students are involved in applied research so as in cycle III to develop autonomous valuable scientific research. In Denmark involving students in research is considered a fundamental principle of university education.

In Denmark research excellence of academic staff is encouraged through various financial incentives: additional funding for institutional development, mobility grants for research at other universities in the country or abroad.

The Ministry of Education (Romania, Lithuania, Denmark, Sweden) grants the right to offer doctoral studies to universities alone or together with research institutes. The right is granted based on external evaluation. Doctorate is considered as based on research studies; it lasts 3 years of full time studies, and in engineering - 4 years.

Issues related to the organization of doctoral studies (PhD students' admission, the organization of doctoral program, appointment of the supervisor) are part of university autonomy. The university establishes rules for access to the PhD program.

Doctoral studies are carried out in doctoral schools, which can be organized: by a university, university consortium or with R&D units and doctoral centres. The organization of doctoral schools is determined by a regulation, which is developed by the Research Committee, the specific elements are detailed in institutions' own regulations. Study programs at the third cycle shall be completed with the defence of the thesis. The university decides on the evaluation, grading and defence procedure. The Faculty or School appoints one or two opponents, and a board of examiners of the PhD thesis and defence, where at least one member is from another university. Only the board makes decisions on grading the thesis and awarding the doctoral degree. The degree is confirmed by the University Senate. For example, in Sweden doctoral education is carried out via PhD programmes offered by a university. There are specific rules for establishing a new PhD programme. Enrolment to PhD studies is regulated by internal university documents. Generally, according to the Swedish legislation a PhD student shall be employed by the university for the period of study – 4 years. Consequently, a PhD student can be enrolled to a programme only if respective university department confirms availability of the funding for the entire period of studies.

In Lithuania, Romania and Sweden there is no different degree than the PhD in science or arts. In Scotland, the higher doctorate degree following the PhD, is awarded to a person for valuable research or publications. The title is awarded to persons from education, based on published works, but it does not have a distinctive position in the qualifications and is considered an honorary title. In Denmark the higher degree of doctor (doktorgraden) is awarded which is similar to the degree of doctor habilitate in Moldova, but, in this case, the requirements are much simpler.

Post-doctorate ("postdoc") is an individual holding a doctoral degree who is engaged in a temporary period of mentored research and/or scholarly training for the purpose of acquiring the professional skills needed to pursue a career path of his or her choosing (http://www.nationalpostdoc.org/policy-22/what-is-a-postdoc).

Thus, analysing the legislation in force of the five European countries with respect to their higher education systems, and the representative internal normative acts from five universities in these countries, it can be observed homogeneity in the treatment of the most important aspects of academic issues. This, in our opinion, is due to the implementation of the baselines of the Bologna process, which aims at harmonizing the education systems, and whose basic components are: academic work and research. Higher education institutions in the EU countries have a well-defined academic autonomy and concrete obligations and responsibilities in front of the central administrative authorities.

Central administration determines policies and development strategies of education, and is responsible for assessing the achievement of these strategies.

Institutions are fully responsible for the quality of the final results being autonomous in the choice of procedures, mechanisms and instruments for the deployment of the educational and research process. The whole process - from planning / program design to the final exam - is

focused on providing the intended learning and research outcomes. All partners are involved in these processes: administration of institutions, academic staff, students and technical staff.

In the legislative acts examined in five European countries and the normative acts of the institutions visited it is specified the important role assigned to students in the quality assurance process: students have a strong voice when it comes to the assessment procedure of the course of (questionnaires/surveys that are made compulsorily after completion of each course / module), students are present in the teams of regular self-evaluation and external evaluation of study programs, they participate in governance and management bodies of the institution and its structures.

The autonomy of universities in the development of relations with the economic environment is also an effective mechanism for increasing the quality in education and research, and is widely used by European universities. By mutual applied research, involving specialists from enterprises in teaching and organization of internships, development of Bachelor / Master theses/projects, through effective technology transfer of industrial and management governance to universities (establishment of strategic development councils at university / faculties), it is exploited the synergy of the development potential of the two sides / environments.

European universities are in constant search for new financing mechanisms / ways, broadening of the spectrum of activities and services provided (such as the entrepreneurship, further education) in order to ensure their sustainable development given the fierce competition on the educational services market.

## 4.5 Emerging Patterns

Tables below summarise key evaluation criteria per autonomy type, common patterns that emerged during the analysis, as well as the emerged variations.

Table 9: Emerging patterns in organizational autonomy

| Evaluation criteria | Emerging patterns | Variations |
|---|---|---|
| University governance | Tendency to have a clear division between governance and management to avoid conflict of interests, to enhance accountability and efficiency | Unitary system vs dual system |
| | The existence of a governing body (not numerous), which includes external members and provides strategic and efficient activity. In some models the external members of the governing body are appointed by an external authority. | No external members are included in the governing bodies. Introducing a consulting body to the university governance with external members. |
| University leadership | The tendency to appoint / designate the rector, and not elect him/her. Non-involvement of external authorities in selecting the rector. The rector is responsible for his/her activity to the governing body of the university. | Appointment of the rector by the governing body vs appointment by an external authority. There is also the possibility of electing the rector by the whole academic community. |
| Managing academic activities | The presence of a collective body, usually the Senate, representing the university community and being responsible for academic issues. | Senate – governing body vs Senate – advisory body. |
| Freedom of universities to decide on the internal structure | In most of the models universities have the freedom to determine their organizational structure and change it. Changes in the organizational structure, in the respective models, do not require approval by external authorities. | Regulation of the internal structure of universities by the legal act. |
| Representation of students in university governance bodies and management | Practically in all of the analysed systems students are represented in all decision-making, executive and advisory structures of the university. This is stipulated in institutional regulations, and in the legislative acts of some countries as well. | The governing bodies include only cycle III students, employees of the institution. |
| University freedom to create legal entities: non-profit and / or commercial | There is a persistent tendency to give universities the freedom and flexibility in creating legal entities: non-profit and / or commercial. | The existence of restrictions on the activities undertaken and the use of proceeds from the activity of these entities |

Table 10: Emerging patterns in financial autonomy

| Evaluation criteria | Emerging patterns | Variations |
|---|---|---|
| Funding models | The reviewed models of university funding cover all university costs | Global funding (grants vs. subventions) |
| Funding mechanisms in higher education | The funding is made on several lines. In all countries: for studies, research, etc. | Taximeter system – Denmark: Romania – the performance is stimulated through a series of indicators and the third component of the funding – the additional funding |
| The methodology for the allocation of budgetary resources for university funding | Based on a calculation formula. It takes into consideration: the number of students and the cost per student. Varies by study cycle, shape and area of study. It is based on the situation from the previous year. An Agreement for a period of 2-3 years is signed. Depends on the existing budget at state level. | The number of students varies from: the physical ones in Lithuania, FTE (by graduation) – in Scotland, only those who promote – in Denmark, Romania equivalent student (is equivalent depending on the degree and type of education). Sweden: 60% FTE: 40% physical students |
| Calculation of the cost of a student's training | Including all of the expenses incurred to the institution | Different methodologies: TRAC – Scotland Full Costing: Sweden, Denmark |
| Forms of private Funding and monitoring | Private funding sources are well determined by various laws and do not essentially differ from country to country. Monitoring of their appliance is undertaken according to strategic decisions made at University level. | Specific, for example, Scotland – Sponsorship of functions |
| University freedom to borrow money from national and international financial markets | The legislation of all countries allows money borrowing from financial markets | No-restrictions loan (Denmark) Loan with the permission of certain national authorities (Scotland- CSF) and within a certain limit (Lithuania) or from specific banks (Sweden) |
| The degree of freedom of universities in determining the size of the tuition fee | Universities determine the amount of the tuition fee | The minimum limit: Lithuania has set a minimum tax threshold (the size of the budget allocation for a student). |

| Evaluation criteria | Emerging patterns | Variations |
|---|---|---|
| | | In other countries: provided that they meet the cost of preparing a student |
| Reporting of the unused funds from one year to another | Next year funding (for teaching and research) is adjusted based on performance in the previous period (1 to 3 years). | Unrestricted reporting (Denmark, Romania), Limitation to a maximum percentage - 10% of the budget (Sweden) Reimbursement of the money left at the end of the year from the state budget with the unconditional reporting of the own sources (Lithuania) |
| The capacity (freedom) of universities to be the owner of the building | In all countries Universities are responsible for the proper management of the building. | Sweden: Universities cannot be the owner of the building, in other countries - the building purchased from its own sources belongs to the university, the one purchased from the state budget - belongs to the State. |
| Policy on the tuition fees for foreigners | The same approach for EU citizens as well as for domestic ones; Higher fee for foreigners (non EU) than for domestic ones. | Universities are free to determine the level of fees: Lithuania, Sweden, Scotland Universities are free to set the charges *in coordination with an external authority*: Denmark Establishing the minimum amount: Romania |
| Scholarships and other financial assistance/support for students | A certain financial support is given to students. | In Romania and Lithuania universities are free to set the size of the scholarship. In Scotland and Sweden – the service is outsourced to independent agencies at country level. In Sweden and Denmark national students have the right to financial aid. |
| Allocation of financial resources within the university | The mechanism, mainly, repeats the allocation mechanism at national level. | Centralized: Lithuania Decentralized: Scotland, Sweden, Denmark, and Romania. The principles applied: The money follow the students - Lithuania The money follow the activities - Denmark |

Table 11: Emerging patterns in HR autonomy

| Evaluation criteria | Emerging patterns | Variations |
|---|---|---|
| Freedom to decide on the recruitment/employment procedures | The higher education institution has the right to develop its own procedures, to set its own criteria of employment to the extent that they do not contradict the general rules of labour relations legislation and the principles of non-discrimination and equal opportunities. The legislation sets out general criteria for hiring and recruitment, and the institutions are entitled to develop these procedures. | In this respect, Romania is an exception, as the criterion of human resources autonomy in this country is very limited by the state. The state establishes minimum requirements and the institution has no right to derogate from these, but it can apply more rigorous criteria. A limitation of university autonomy is reflected in the procedure of announcing vacancies and competition development. |
| Institution's freedom to decide on the criteria for employees' promotion | State intervention in this area is very small, each higher education institution is entitled to establish its own assessment procedures, higher education institutions pledging to ensure the respect of the equal opportunities principle and will not allow any discrimination on grounds of race, nation, ethnic origin, sex or disability, age, religion, sexual orientation or marital status. The State establishes only the general legal framework in the field, and the institutions are entitled to adopt their internal system. At government level the description of occupational standards is performed: e.g.: HERA in Scotland, Memorandum on Job Description in Denmark etc. | The exception is Romania, where a limited autonomy in this area is seen: performance indicators are developed by the institution, but the state maximally monitors the performance of the assessment procedures through the Romanian Agency for Higher Education Accreditation and Certification. |
| Institution's freedom to decide on the workload | In general, the workload includes teaching and research and administration activities, while the distribution of activities is decided at department level, depending on the potential of human resources of the subdivision. | In Romania, the amount of activities is unified at national level, being regulated by the Law on National Education. |
| Institution's freedom to decide on the salary system | The law sets the salary system, setting maximum and minimum wage limits, institutions being flexible at establishing award schemes, various salary increases, depending on the complexity and volume of work performed by an employee. | In Romania, the criterion of human resources autonomy is limited by the State, which, by the Framework Law no. 284/2010 regarding the unitary remuneration of staff paid from public funds, aims at establishing a unitary payment system for public sector staff, paid from the general consolidated state budget. |

| Evaluation criteria | Emerging patterns | Variations |
|---|---|---|
| | | Similarly, there are exceptions in Scotland as well, where the higher education institution is free to set its own salary and rewarding system, the State not being involved in any way in this area. |
| Institution's freedom to decide on the means of labour relations' termination | Regarding the respective criterion, the institutions have developed policies of non-discrimination at termination of employment, and the grounds are generally covered under labour legislation of each country. Dismissal of senior staff is specifically regulated, listing the conditions to be met when applying this ground, the difference being only in the bodies taking the decision: from internal councils in Lithuania, Denmark, Sweden and Scotland to the resort Ministry in Romania. | |

Table 12: Emerging patterns in academic autonomy

| Evaluation criteria | Emerging Patterns | Variations |
|---|---|---|
| Introduction and liquidation of study programs | Common types of programs are LMD. Institutions are free to decide on the introduction or liquidation of the study programs cycles I, II, III, if they meet the rules set by the Ministry. | In some countries (Scotland, Denmark) short – term (2.3 years) higher education professional programs are allowed as well. |
| Enrolment | The ME or other structure is responsible for the centralized admission on behalf of higher education institutions.[? not in Scotland] The registration is performed online. The studies are free for domestic and EU citizens, foreigners have to pay taxes. The admission to master's and doctoral studies is determined by the university. The ME determines the general rules. | Universities are autonomous in using different methods of vocational guidance. The training of students is fully the responsibility of university structures. |
| Recognition of studies | The ECTS constitutes the reference element used by universities at recognizing studies or undertaken study periods. The studies performed within motilities are recognized under agreements. A state authority (ex. NARIC in Scotland) is responsible for the recognition of diplomas, access to education and promotion of the profession. [NARIC's role relates to overseas qualification evaluation not the recognition of Scottish qualifications –this needs to be amended] | The rules for the recognition of credits and periods of study performed in another university in the country or abroad are set by the university and are components of curricula. |
| Quality assurance | HEIs have the right to offer only degree programs accredited by the Independent Accreditation Agency for HE.{Not the case in Scotland] Fundamental criteria: labour market demand; research-based studies; internal continuous quality assurance program. Quality assurance is the obligation of the institution, which draws up its own system. | Participation of foreign agents in the external evaluation of study programs by some countries (Scotland, Denmark) is not accepted. There are various ways of performing the accreditation / non-accreditation decision-making process. |
| National Qualifications Framework | A National Qualifications Authority is the statutory body awarding and accrediting qualifications. They are registered in the National Register, which is public. The levels of qualification for higher education are described in terms of study finalities (descriptors) and in terms of credits. Four levels of qualification for higher education. | Different number of levels, including for higher education (ex. CNC of Scotland offers 12 levels, 6 for higher education, the CC of the EU and other countries - 8 and 4, accordingly). |

| Evaluation criteria | Emerging Patterns | Variations |
|---|---|---|
| The content and implementation of the study program (organization of studies) | HEIs are responsible for designing programs and courses, current and final assessment procedures. But the program curriculum (objectives, learning outcomes, competences) must comply with CNC legal acts issued by the Ministry or other subordinated entity (ex. Quality Code in Scotland). | Specific for the Danish system is the external examination at both final stages of the study program and at the assessment of semester modules as well. The way of completing the license/bachelor cycle differs (with or without project). |
| Employment | The rate of employment and career advancement is considered a benchmark of the study program and institution. Departments keep graduates' employment record and their career progression; organize students' training for the employment process. | There is a difference in the involvement of state structures on post diploma course record (records, feedback). In some countries universities are obliged by law to have career guidance structures. |
| Workload of academic staff | The trend is to distribute the workload between research and teaching (50: 50, or 60:40, 40 R) and account it. Departments / chairs decide. E.g., in Sweden there is no strict recommendation on research/teaching commitments This division is set out on department level depending on current situation. | Different methods of teaching hours', research and community interest activities' accounting. |
| Scientific university research | Education and research policy is defined and implemented by the ME, the Research Council and the Centre for Quality Assessment (in teaching and research). The research is funded by the state budget and projects. The University is autonomous in creating its own organizational structures and research performance. | Different ways of cooperation with business environment in research areas. This collaboration is often organized as competence centres, associations, partnerships, which are autonomous units. |
| Doctoral studies | Are considered as research-based studies, have a minimum duration equivalent of, usually, 3 years full time; in engineering - 4 years. The University decides on the curriculum, evaluation, assessment and support procedure. | In Denmark and Scotland there is a Ph.D. education, provided on the basis of published works, but it doesn't have a distinctive position in the qualifications. In the UK, besides the PhD, a professional Ph.D. is also provided. |

## 5. CONCLUDING REMARKS

This report summarized the key findings from the four benchmark studies conducted by the EUniAM Lead Task Force team in 2014. The Lead Task Force team conducted a comparative analysis of institutional university autonomy in Denmark, Lithuania, Romania, Scotland, and Sweden. For each type of autonomy, the members of the team identified respective evaluation criteria and searched for similarities and differences in approaches to higher education sectors in these countries.

The organizational dimension is in the centre of changes. An approach to corporatization of universities is emerging, separating governance from management, introducing university Boards where majority of members are elected from outside university. More autonomy and independence from the Ministry brings increased public responsibility and accountability. The experience from visited countries shows that better governance of HEIs is provided by the governing bodies with a small number of members, among which external members form the majority. It was also interesting to observe that adopting corporate type of leadership contributed to a wider autonomy in the universities management and in the determination of their internal structure.

The role of students in university governance and management increases. Students become members of all university bodies - governing as well as managing bodies. Student centred learning is a trend in the university educational system.

The role and tasks of academic staff is changing. Academic staff is no longer a teacher, but a facilitator in the student-centred learning process. Equal share of their time is devoted to research and knowledge transfer for academic staff. Academic staff's governance and administrative responsibilities also increase. The fact that the payment for the academic activities includes not only teaching but also research activities confers attractiveness to academic career and can serve as an example of good practice for our country in the light of the new approach of the academic load structure and remuneration system for academic staff.

At the sector level, the tendency in the benchmarked countries is for Ministries of Education to be small, and because of that considerable authority is delegated to national agencies.

The highlighting of similarities and differences across the five systems reveals that there is no perfect model of human resource autonomy, but there are good practices of universities with old traditions that if taken over and adjusted to the socio-economic realities of our country could give good results, would strengthen institutional capacities of higher education and would increase the autonomy of existing human resources management, correlating it with the principle of public accountability of each institution or: university autonomy means freedom with a high level of responsibility.

A considerable amount of work has gone into this study which demonstrates areas of convergence and divergence under each of the main autonomy headings. The benchmarking process has been an important part of the project allowing colleagues not only to identify good practice under each of the main headings for university autonomy but also to recognise

that there are varieties of approach to autonomy which have developed over time and have distinctive cultural features. The benchmarking provides a sound basis both for a deeper understanding of aspects of university autonomy and for the preparation of proposals for the development of the higher education sector in Moldova which will be strengthened by international references. It would help critical readers and also provide the platform for the recommendations and proposals for implementation in the final work package of the EUniAM project.

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**Appendix 1: Benchmark Analysis of Organizational Autonomy**

# Benchmark Analysis of

# Organizational Autonomy

# in Denmark, Lithuania, Romania,

# Scotland and Sweden

## Angela Niculiţa

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First draft submitted: September 2014

Revised:  Ocotber 2014

Final draft: January 2014

**Chisinau**

**Appendix 2: Benchmark Analysis of Financial Autonomy**

# Benchmark Analysis of

# Financial Autonomy

# in Denmark, Lithuania, Romania, Scotland

# and Sweden

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Revised:  Ocotber 2014

Final draft: January 2014

**Chisinau**

**Appendix 3: Benchmark Analysis of HR Autonomy**

# Benchmark Analysis of Human Resource Autonomy in Denmark, Lithuania, Romania, Scotland and Sweden

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Revised:  Ocotber 2014

Final draft: January 2014

**Chisinau**

**Appendix 4: Benchmark Analysis of Academic Autonomy**

# Benchmark Analysis of

# Academic Autonomy

# in Denmark, Lithuania, Romania,

# Scotland and Sweden

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First draft submitted: September 2014

Revised:  Ocotber 2014

Final draft: January 2014

**Chisinau**

**Appendix 5: Mission Agenda to Lithuania - Jan 20-24, 2014**


**Monday, January 20**

10.00 - 10.15   Welcome by Romeo V. Turcan and Birutė Mikulskienė.

10.15 – 11.30   Welcome by the head of administration associate professor Saulius Spurga - presentation and discussions about reforms in MRU.

13.00 – 15.30   Working with documents; Round table with B.Mikulskiene, S.Svaikauskiene.


**Tuesday, January 21**

10.00-12.00   Working with documents. Round table with B.Mikulskiene, S.Svaikauskiene.

13.00-17.00   Working with documents. Round table with A.Stasiukynas, S.Svaikauskiene.


**Wednesday, January 22**

9.00 – 12.00   Working with documents. Round table with B.Mikulskiene, S.Svaikauskiene.

13.00 – 16.45   Working with documents. Round table with A.Stasiukynas, S.Svaikauskiene. Mykolas Romeris University, Ateities St. 20, II-230


**Thursday, January 23**

10.00-12.00   Working with documents. Round table with A.Stasiukynas, S.Svaikauskiene.

13.00-17.00   Working with documents. Round table with A.Stasiukynas, S.Svaikauskiene.


**Friday, January 24**

9.00 – 12.00   Summary follow-up; team meeting

**Appendix 6: Mission Agenda to Scotland – Feb 3-7, 2014**

**Monday, February 3**

09:30 – 11:00  Group meeting, preparing for the week meetings

11:00 – 12:00  Martin Gregory, Research and Knowledge Exchange Services

13:00 – 14:30  Summary follow-up group meeting, preparing for the week meetings

14:30 – 16:00  Caroline Laurie, Hunter Centre for Entrepreneurship


**Tuesday, February 4**

09:30 – 10:30  Sara Carter, Hunter Centre for Entrepreneurship

11:00 – 12:00  Head of Governance

13:30 – 14:30  Eleanor Shaw, Hunter Centre for Entrepreneurship

14:30 – 16:00  Summary follow-up group meeting, preparing for the week meetings


**Wednesday, February 5**

09:00 – 12:00  Marin Marinov, University of Gloucestershire

13:30 – 14:30  Marin Marinov, University of Gloucestershire (cont'd)

14:30 – 16:00  Summary follow-up group meeting, preparing for the week meetings


**Thursday, February 6**

Travel to Edinburgh

10:30 – 12:00  Paul Hagan, Director Research and Innovation, Scottish Funding Council

14:00 – 16:00  Ulrike Peter, Senior Policy Officer, Universities Scotland

Travel from Edinburgh


**Friday, February 7**

09:30 – 12:00  Summary follow-up group meeting, preparing for the week meetings

14:00 – 15:00  Claire Woodward-Nutt, Team Leader, Higher Education and Leaner Support
                        Division, Ministry of Education

**Appendix 7: Mission Agenda to Sweden – Feb 16-22, 2014**


**Monday, February 17**

9:30-11:00    Welcome by Victor Kordas, Royal Institute of Technology (KTH),

14.00-6.30    University governance. Organizational Structure. Lennart Johansson, Department of Communication and International Relation, former KTH Administrative Director.


**Tuesday, February 18**

9.30-12.00    Administration in the framework of university autonomy in Sweden. Anders Lundgren, Head of University Administration, KTH

13.00-6.30    Administration in the framework of University Autonomy in Sweden. Lennart Johansson, Department of Communication and International Relation, former KTH Administrative Director


**Wednesday, February 19**

09.30-12.30    Academic component of University Governance. Organizing study process at KTH: planning, programmes, courses, responsibilities of schools, departments and central administration. Margareta Karlsson, Senior Administrative Officer; Carina Kjorling, Senior Administrative Officer, Planning and Evaluation Office, KTH

14.00-16.30    Personnel/Staffing component of University governance. Anna Thöresson Berg, Human Resource Manager


**Thursday, February 20**

9:30-12:00    System of higher education in Sweden: organization and functioning of the system, key actors: universities, agencies, government. Lennart Ståhle, Swedish National Agency for Higher Education

13:00-14:00    System of higher education in Sweden: organization and functioning of the system, key actors: universities, agencies, government (con't). Lennart Ståhle, Swedish National Agency for Higher Education


**Friday, February 21**

9:30-12:00    Planning educational activities at KTH. Margareta Karlsson, Senior Administrative Officer, Planning and Evaluation Office, KTH

13:00-16:00    Financial component of University Governance. University Funding. Cost per student. Marie Kanlroth, Swedish National Agency for Higher Education

**Appendix 8: Mission Agenda to Denmark – Mar 3-7, 2014**

**AALBORG**

**Monday, March 3**

09:00-09:30    Welcome by Romeo V. Turcan, project coordinator

09:30-12:00    Birgitte Gregersen, Department of Business and Management,

13:00-14:30    Meeting students from Moldova

15:00-17:00    Summary follow-up, team meeting, preparing for the week meetings,

**Tuesday, March 4**

10:00-12:00    Olav Jul Sørensen, issues of academic autonomy, Head of IBC research
               Centre

13:00-14:30    Ole Garsdal Hansen, issues of financial autonomy, Senior Consultant

15:00-16:30    Inger Askehave, Vice-Rector

**Wednesday, March 5**

09:00-10:30    Henrik Find Fladkjær, Head of Study Board, issues of academic autonomy,

11:00-12:30    Summary follow-up, team meeting, preparing for the week meetings,

13:30-15:00    Erik de Graaff, PBL at Aalborg University

17:00          Departure to airport; travel to Copenhagen

**COPENHAGEN**

**Thursday, March 6**

10:30-12:00  Susanne Bjerregaard, Secretary General, Universities Denmark

14:30-16:00  Jette Nielsen, Head of Division, the Danish Agency for Higher Education

**Friday, March 7**

09:00-12:00  Summary follow-up, team meeting

**Appendix 9: Structure of HE sector in Denmark**
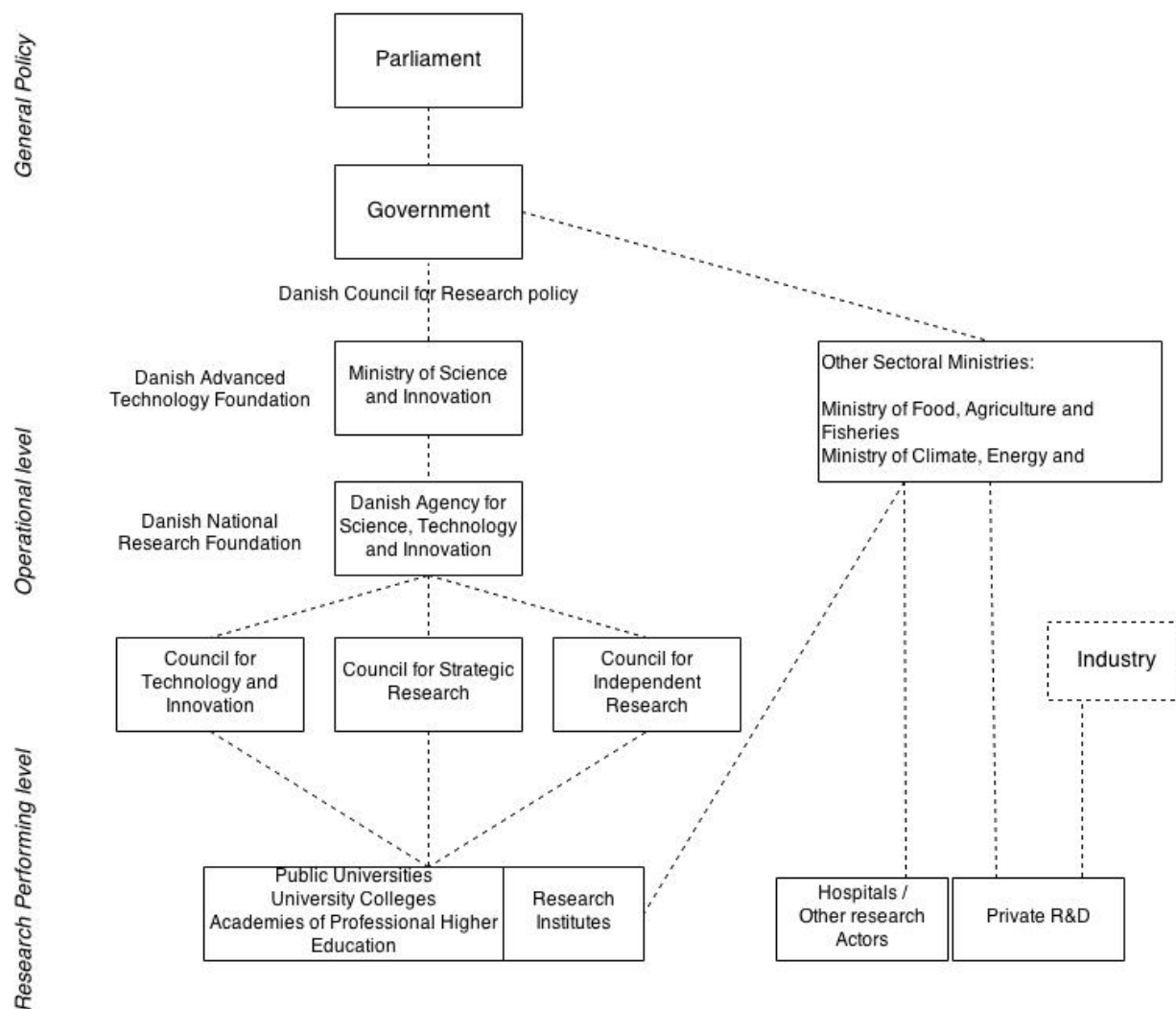
**Appendix 10: Structure of HE sector in Lithuania**
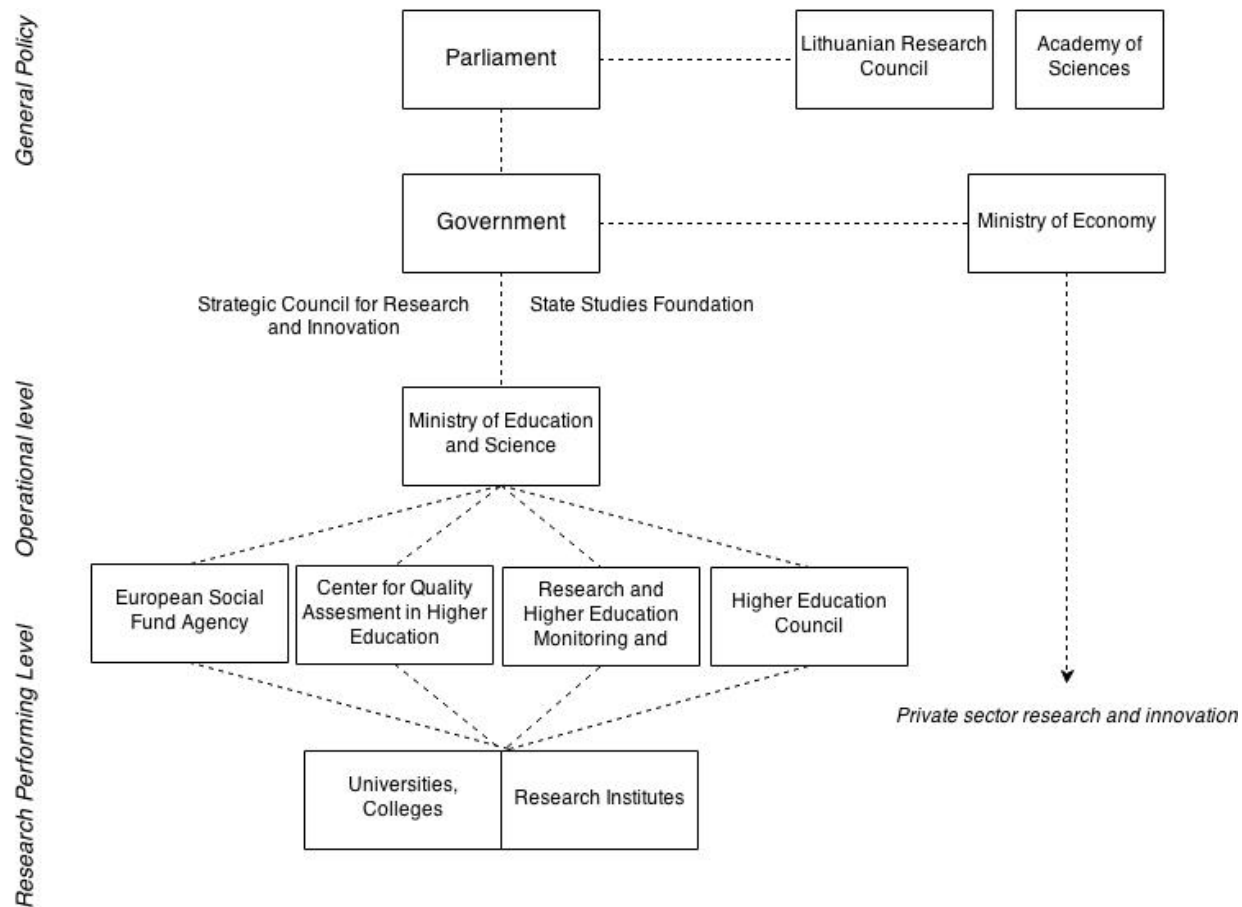
**Appendix 11: Structure of HE sector in Romania**
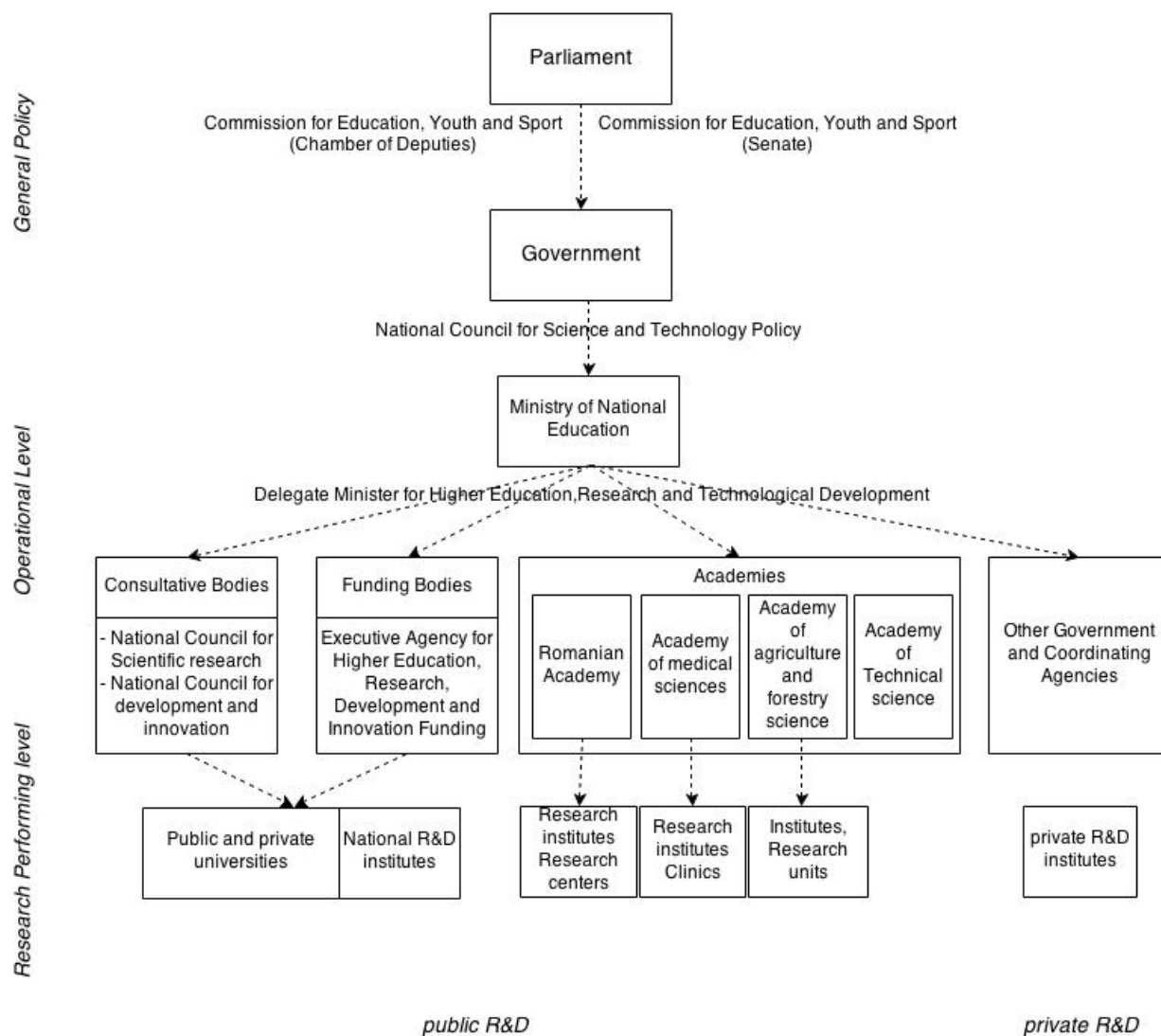
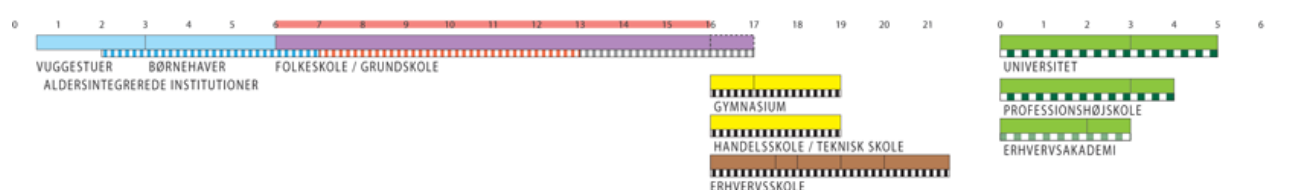**Appendix 12: Structure of HE sector in Scotland**
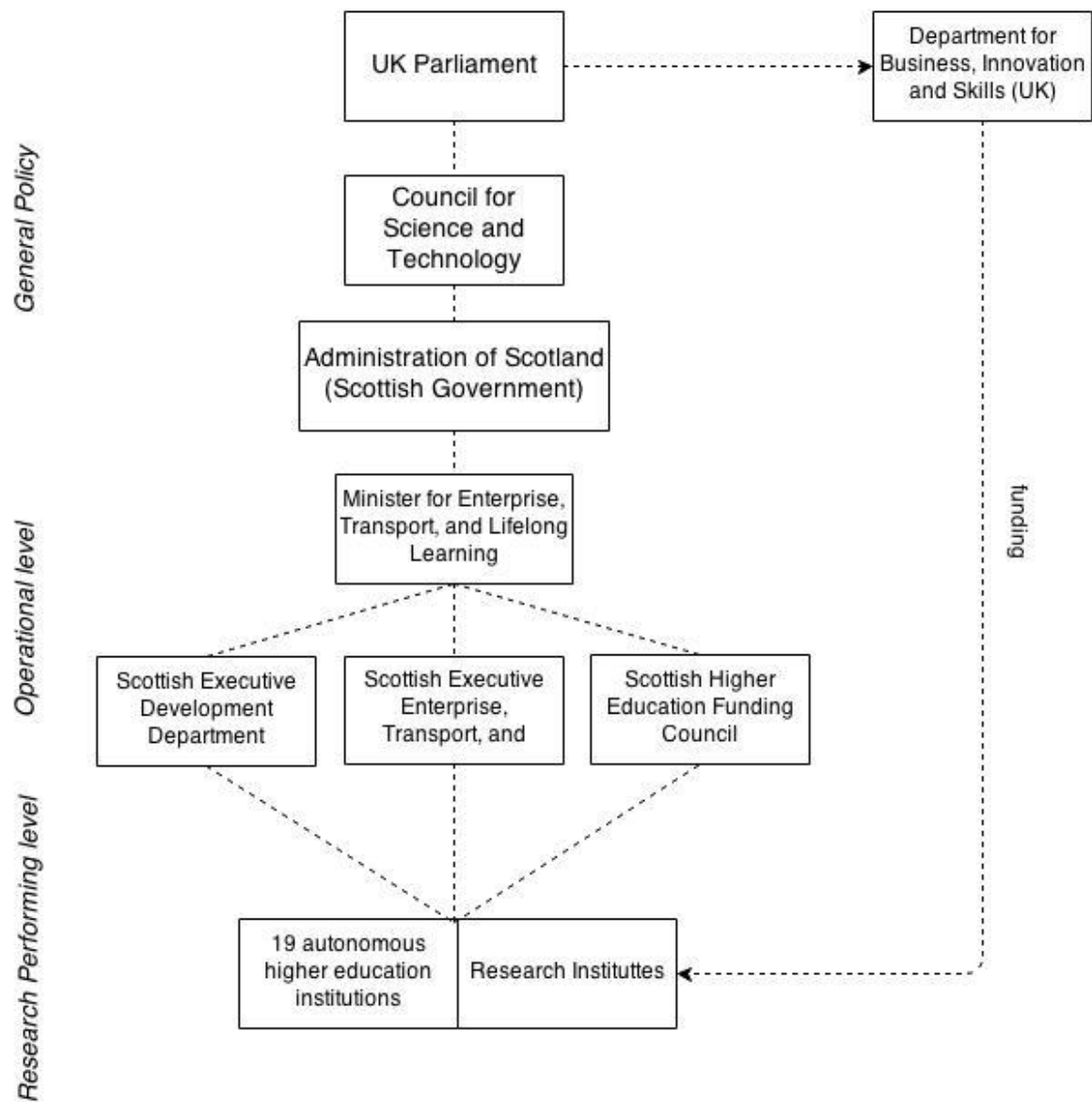
**Appendix 13: Structure of HE sector in Sweden**
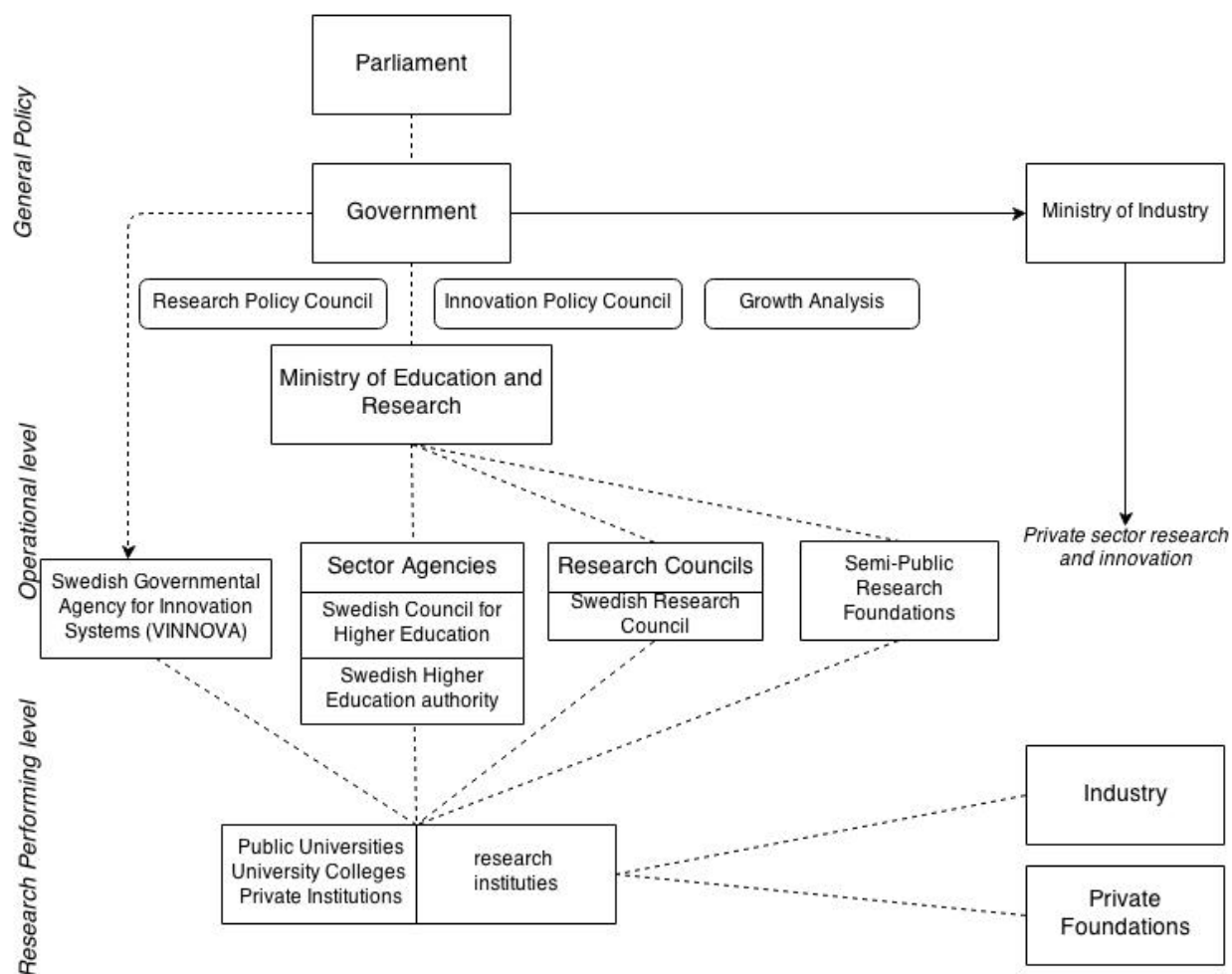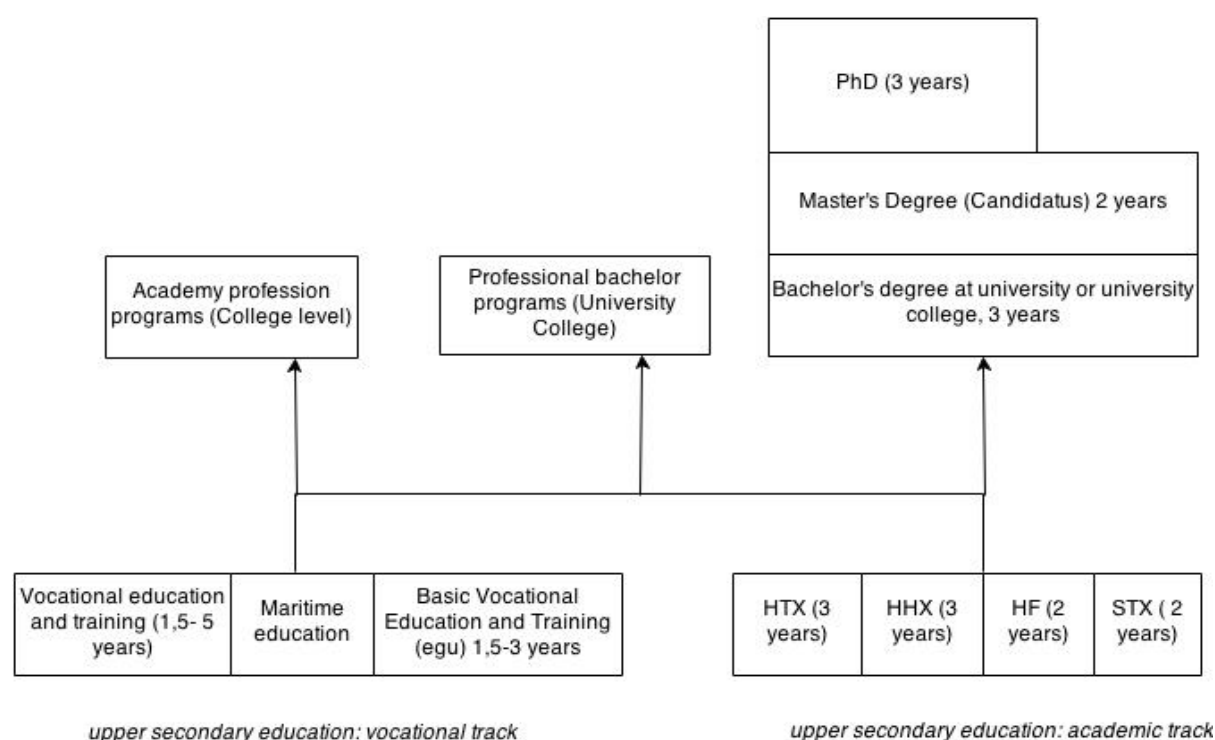
**Appendix 14: Structure of educational system in Denmark**

A. Structure of educational system in Denmark: from primary school to university



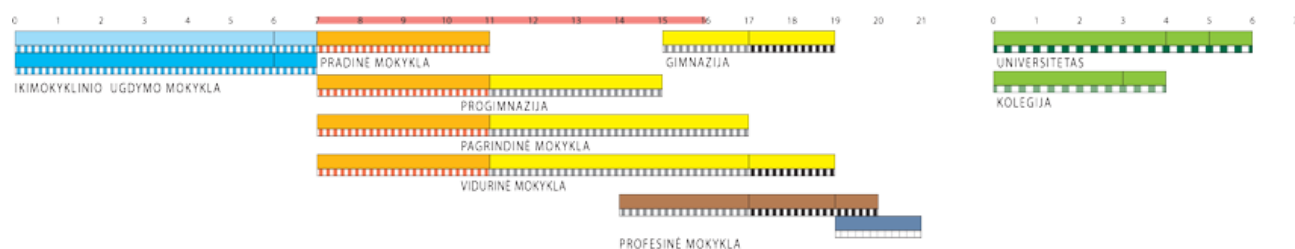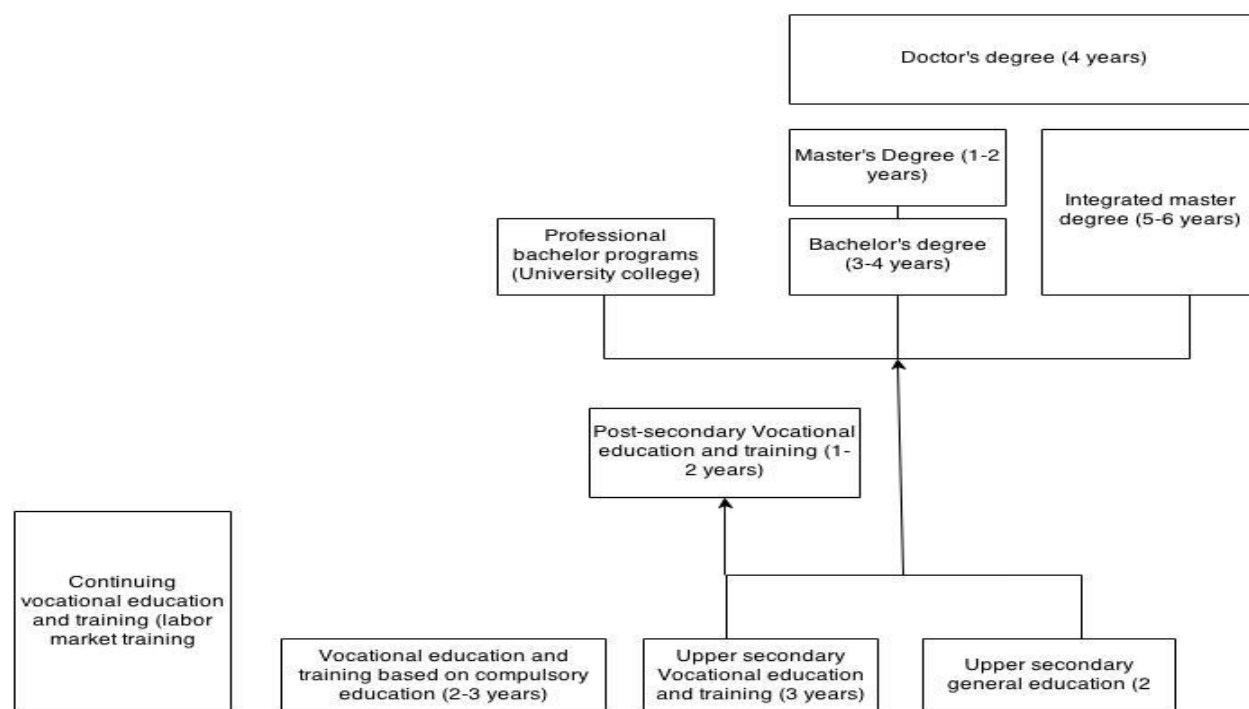Source: The structure of the European education systems 2013/14: schematic diagrams (EC 2013)

B. Structure of educational system in Denmark: from upper-secondary to post-secondary education



* STX (Upper Secondary School Leaving Examination) (three years), HF (Higher Preparatory Examination) (two years), HHX (Higher Commercial Examination) (three years), and HTX (Higher Technical Examination) (three years).

**Appendix 15: Structure of educational system in Lithuania**

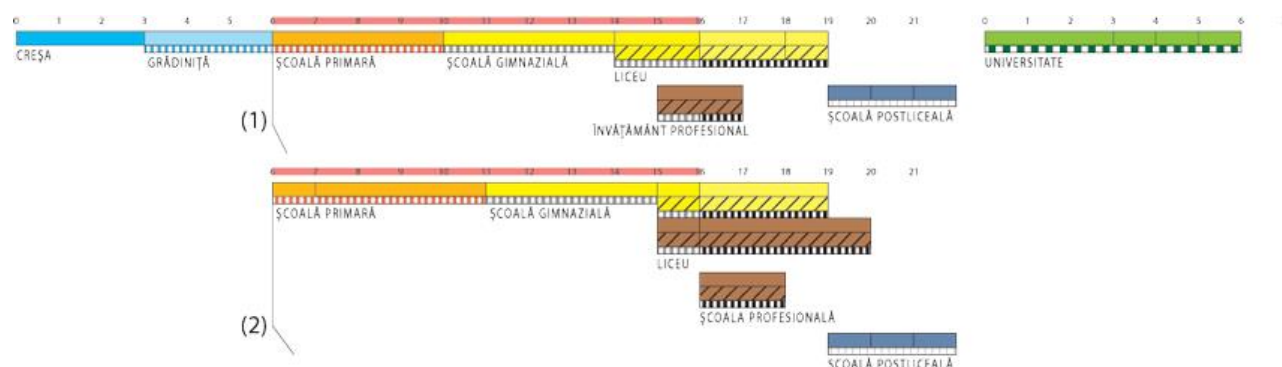A. Structure of educational system in Lithuania: from primary school to university



Source: The structure of the European education systems 2013/14: schematic diagrams (EC 2013)

B. Structure of educational system in Lithuania: from upper-secondary to post-secondary education
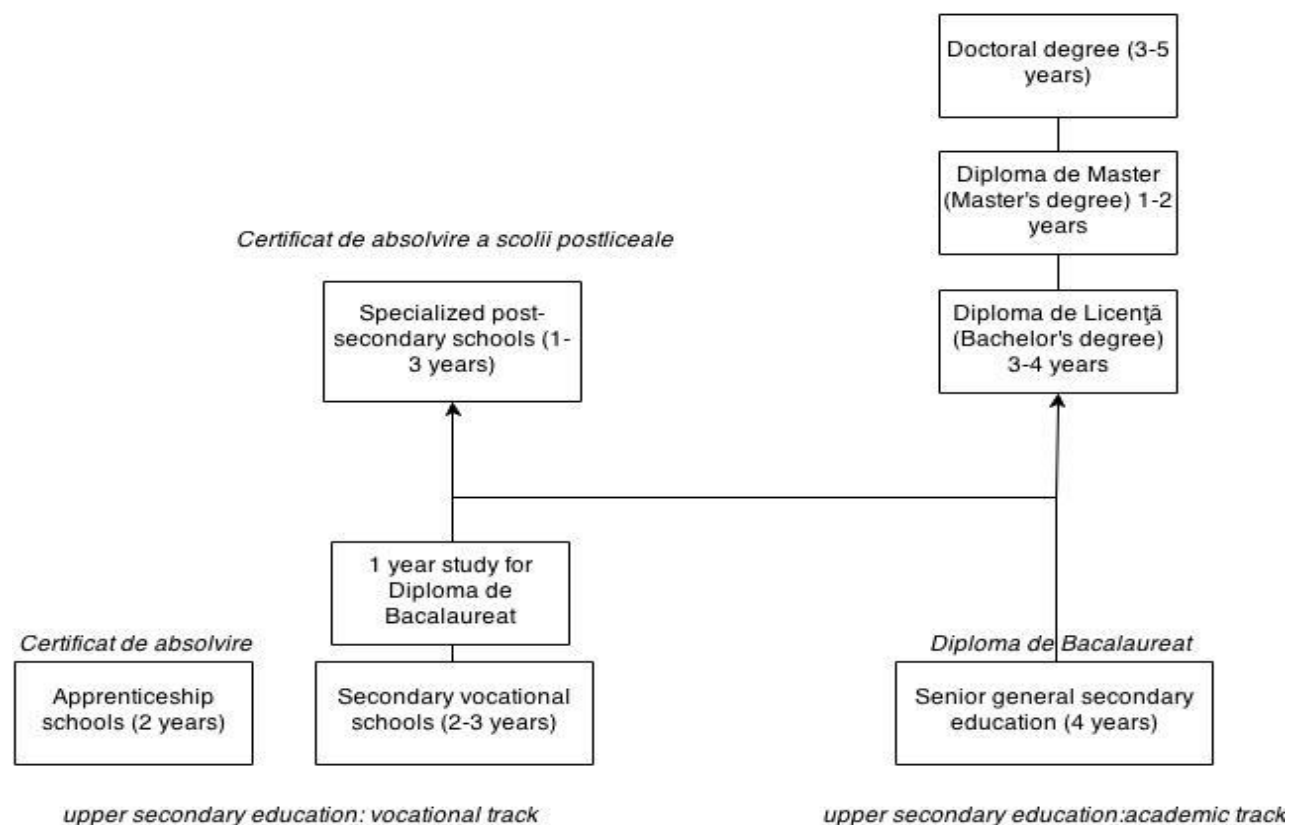
**Appendix 16: Structure of educational system in Romania**

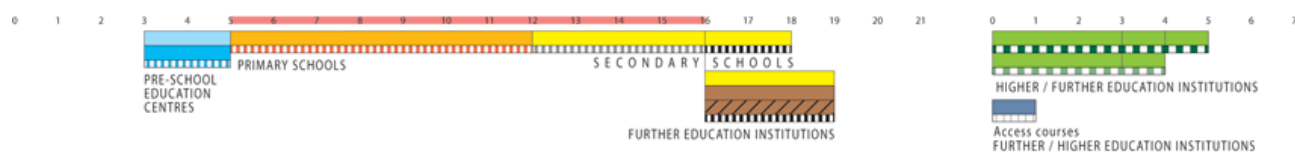A. Structure of educational system in Romania: from primary school to university



Source: The structure of the European education systems 2013/14: schematic diagrams (EC 2013)

B. Structure of educational system in Romania: from upper-secondary to post-secondary education
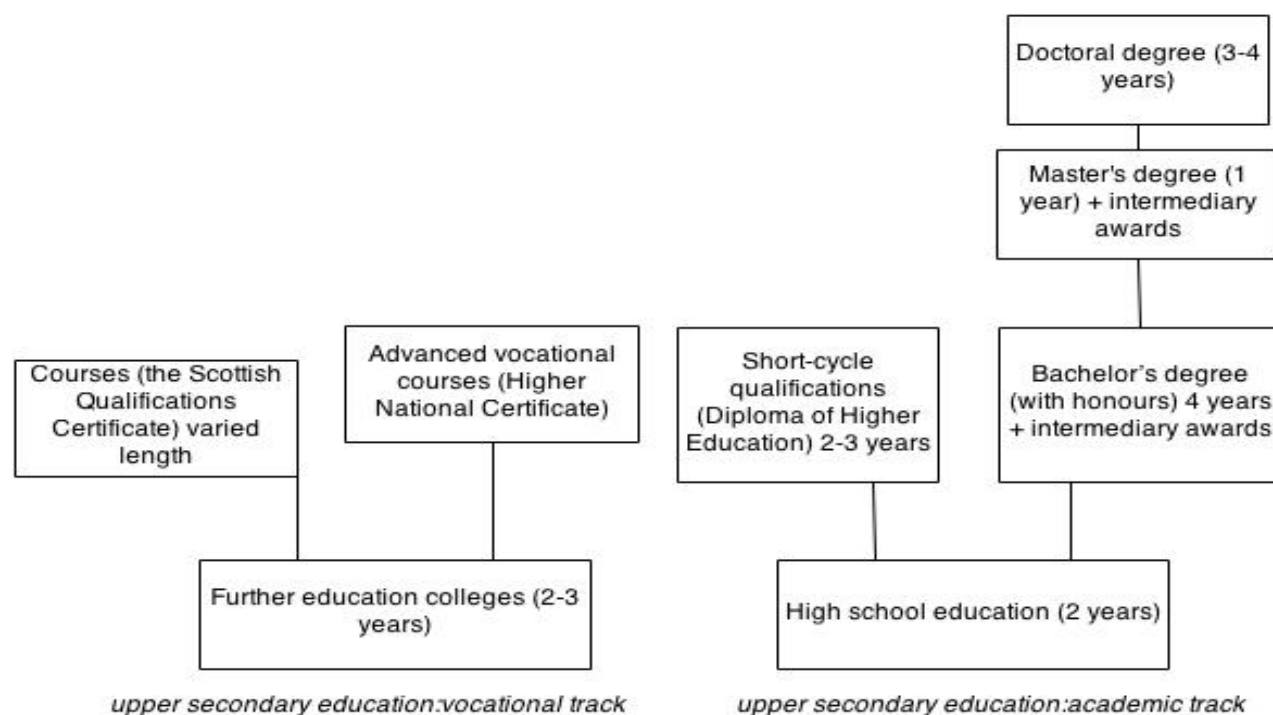
**Appendix 17: Structure of educational system in Scotland**

A. Structure of educational system in Scotland: from primary school to university
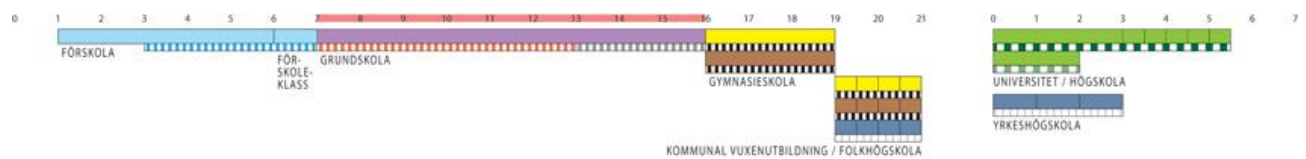


Source: The structure of the European education systems 2013/14: schematic diagrams (EC 2013)

B. Structure of educational system in Scotland: from upper-secondary to post-secondary education



upper secondary education:vocational track          upper secondary education:academic track

**Appendix 18: Structure of educational system in Sweden**

A. Structure of educational system in Sweden: from primary school to university



Source: The structure of the European education systems 2013/14: schematic diagrams (EC 2013)

B. Structure of educational system in Sweden: from upper-secondary to post-secondary education