

**NATIONAL CENTER FOR STRATEGIC RESEARCH IN
HIGHER EDUCATION**

Yu. L. Sargsyan, A.S. Budaghyan

***TOWARDS EUROPEAN HIGHER EDUCATION AREA
(EHEA) THROUGH BOLOGNA PROCESS***

**CURRENT STATE, DEVELOPMENT TRENDS
AND PROBLEMS OF THE BOLOGNA
PROCESS IN EHEA AND ARMENIA**

ANALYTICAL REPORT

Y E R E V A N 2007

This report has been created with the financial support of **Open Society Institute Assistance Foundation – Armenia** in the frames of *Higher Education Support Program*.

The authors express their sincere gratitude to the Foundation for the funding and assistance in all stages of project implementation.

The presented text of translation includes only the fragments of the original Report related immediately to Bologna Process in Armenia. The text does not contain also the Annexes of the Report though there are some references to them.

CONTENTS

1. Introduction	7
1.1. Background Information	7
1.2. Main Goals and Objectives of the Document	10
a) Goals	10
b) Objectives	10
1.3. Methodology of the Report	10
2. Adoption of a System of Easily Readable and Comparable Degrees	13
2.1. Situation in Armenia: Main Results and Progress Indicators	13
2.2. Preventive Factors of the Process, Existing Problems and Needs	13
2.3. Recommendations on Further Development Strategy of the Process and its Legislative Support	14
a) Establishment of National Qualifications Framework	14
b) Introduction of European Diploma Supplement	16
c) Recommendations on Amendments and Additions to the Current Legislation	16
3. Adoption of a System Based on Initially Two and Now Three Main Cycles	18
3.1. Situation in Armenia: Main Results and Progress Indicators	18
3.2. Preventive Factors of the Process, Existing Problems and Needs	19
3.3. Recommendations on Further Development Strategy of the Process and its Legislative Support	20
a) Structural Issues on Transition to 3-Cycle System of Higher Education	20
b) Curricular Reform Targeted at Improving Employability of Graduates and Harmonization with European Standards	21
c) Recommendations on Amendments and Additions to the current legislation	23
4. Establishment of a System of Credits	24
4.1. Situation in Armenia: Main Results and Progress Indicators	24
a) Legal and Methodical Basis for Establishing Credit System in Armenia's Higher Education System	24
b) Status of Credit System Implementation in HEIs of Armenia	25
4.2. Preventive Factors of the Process, Existing Problems and Needs	28
4.3. Recommendations on Further Development Strategy of the Process and its Legislative Support	30
a) Recommendations on Activities/Measures Supporting the Credit Transition	30

<i>b) Recommendations on Amendments and Additions to the Current Legislation</i>	30
5. Promotion of Mobility for Students and Academic/Administrative Staff	32
5.1. Situation in Armenia: Main Results and Progress Indicators -----	32
5.2. Preventive Factors of the Process, Existing Problems and Needs -----	33
5.3. Recommendations on Further Development Strategy of the Process and its Legislative Support -----	35
<i>a) Measures Targeted at Promoting Mobility</i>	35
<i>b) Recommendations on Amendments and Additions to the Current Legislation</i>	37
6. Promotion of European Cooperation in Quality Assurance	39
6.1. Situation in Armenia: Main Results and Progress Indicators -----	39
<i>a) Current Legislative Framework</i>	39
<i>b) External Quality Assurance Processes</i>	40
<i>c) Internal Quality Assurance Processes</i>	42
6.2. Preventive Factors of the Process, Existing Problems and Needs -----	44
6.3. Recommendations on Further Development Strategy of the Process and its Legislative Support -----	45
<i>a) Recommendations on Strategy</i>	45
<i>b) Recommendations on Amendments and Additions to the Current Legislation</i>	46
7. Promotion of European Dimension in Higher Education	48
7.1. Situation in Armenia: Main Results and Progress Indicators -----	48
7.2. Preventive Factors of the Process, Existing Problems and Needs -----	49
7.3. Recommendations on Further Development Strategy of the Process and its Legislative Support -----	50
<i>a) Recommendations on the Strategy for Further Development of the Process</i>	50
<i>b) Recommendations on Amendments and Additions to the Current Legislation</i>	51
8. Lifelong Learning	53
8.1. Situation in Armenia: Main Results and Progress Indicators -----	53
8.2. Preventive Factors of the Process, Existing Problems and Needs -----	53
8.3. Recommendations on Further Development Strategy of the Process and its Legislative Support -----	55
<i>a) Recommendations on Lifelong Learning Strategy</i>	55
<i>b) Recommendations on Amendments and Additions to the Current Legislation</i>	57

9. Higher Education Institutions and Students as Main Actors and Partners in the Bologna Process	59
9.1. Situation in Armenia: Main Results and Progress Indicators-----	59
9.2. Preventive Factors of the Process, Existing Problems and Needs -----	59
9.3. Recommendations on the Further Development Strategy of the Process and its Legislative Support -----	61
<i>a) Recommendations on the Further Development Strategy of the Process ..</i>	<i>61</i>
<i>b) Recommendations on Amendments and Additions to the Legislation</i>	<i>62</i>
10. Promoting the Attractiveness of EHEA.....	63
10.1. Situation in Armenia: Main Results and Progress Indicators -----	63
10.2. Preventive Factors of the Process, Existing Problems and Needs -----	64
10.3. Recommendations on Further Development Strategy of the Process and its Legislative Support-----	65
<i>a) Recommendations for Enhancing the Attractiveness and Competitiveness of Armenian Higher Education in Line with Bologna Process Strategy.....</i>	<i>65</i>
<i>b) Recommendations on Amendments and Additions to the Current Legislation</i>	<i>67</i>
11. Doctoral Studies and the Synergy between the European Higher Education Area and the European Research Area	69
11.1. Situation in Armenia: Main Results and Progress Indicators -----	69
11.2. Preventive Factors of the Process, Existing Problems and Needs -----	70
11.3. Recommendations on Further Development Strategy of the Process and its Legislative Support-----	73
<i>a) Restructuring of Postgraduate cycle (aspirantura) into a structured research-study program</i>	<i>73</i>
<i>b) Increasing number of postgraduate students, improving the planning and admission to postgraduate studies in line with demand of higher education, science and innovative economy in research workforce.....</i>	<i>75</i>
<i>c) Recommendations for Amendments and Additions to the Current Legislation</i>	<i>76</i>
General conclusions	79
I. From Bergen to London: Progress towards EHEA -----	79
1. Structural Reform.....	79
1.1. Transition to three-cycle HE system	79
1.2. National frameworks of qualifications	79
1.3. Joint programs and degrees.....	79
2. Bologna Tools for Mobility and Mutual Recognition.....	80
2.1. ECTS-Compatible Credit Systems	80

2.2. European Diploma Supplement	80
2.3. Mobility	80
2.4. Recognition	80
3. Quality Assurance	81
4. Synergy of higher education and research	81
5. Lifelong Learning	82
6. EHEA in the global context	82
7. General assessment of the situation	82
II. Towards 2010: The Further Course and Future of the Bologna Process -----	83
Conclusion	Error! Bookmark not defined.

1. Introduction

1.1. Background Information

On May 19, 2005 the Republic of Armenia (RA) Minister of Education and Science signed the Bergen Communiqué of the Ministers of Education from the Bologna participating countries; thus Armenia officially joined the Bologna process committing itself to completing the implementation of main principles of the Bologna process by its specific action lines by 2010 and becoming part of the emerging European Higher Education Area (EHEA).

European Integration in education and particularly in higher education is a real historical challenge for Armenia in moving towards European Integration. Participation in the Bologna process firstly is a unique opportunity for reforming and updating higher education system of the country in consistency and harmony with the European quality standards and making it compatible to European systems. On the other hand, higher education reforms guided by the Bologna principles are called to help the higher education institutions of Armenia to adapt themselves and be responsive to the developing knowledge based economy and changing needs of the global labor market, improve their competitiveness, external attractiveness and employability of the graduates, expand the social mission of the HEIs and their participation in the processes aimed at developing modern civil society and innovative economy.

Integration to EHEA is also challenging commitment as it implies implementation of profound reformations in our higher education system to adjust it to the requirements of the Bologna process. This means to introduce a 3-cycle degree system that is easy to read and compare, transition to credit system of educational provision concurrently initiating radical curricular changes and encouraging unrestricted academic mobility of students and teachers, to establish European standards of quality assurance contributing to the increased external attractiveness of the national educational system and the EHEA, and create preconditions for the development of lifelong learning system, increased role of students in the current reforms, synergy of education and research processes in the higher educational institutions (HEIs). These interrelated

systemic changes establish prerequisites for Armenia's full-fledged participation in EHEA.

Short reference to the backgrounds of the Bologna process in Armenia: Internationalization trends were recorded in our higher education system much earlier than the official start of the Bologna process (June 1999), since the very first days of re-establishment of independence 2-cycle system of higher education (bachelor-master) was first introduced in the State Engineering University of Armenia still in 1992 in the frames of Restructuring of the Yerevan Polytechnic Institute (SEUA master plan). The two-cycle model was later introduced into other higher educational institutions of Armenia (YSU¹, AAA²). Later (1994) a prototype of the third – Doctoral cycle of the Bologna process was initiated at SEUA-Researcher's study program with conferring of Researcher's degree. The two-cycle structure of higher education and Bachelor's, Master's and Researcher's degrees were legally stipulated by the RA Law on Education (May, 1999). It is worth-mentioning that in Armenia the official genesis of the two-cycle (currently three-cycle) system which is one of the cornerstones of the Bologna process preceded the Bologna Declaration. The referred law for the first time (Article 5.4) documented Armenia's intention of integrating with the international education system as a principle of state policy. This provision was further elaborated in the RA Law on Higher and Postgraduate Professional Education (December, 2004) reflecting the Bologna principles on comparability of qualifications/degrees, autonomy of HEIs and academic freedom, international mobility of students. Preconditions were established for introducing European Credit Transfer and Accumulation System (ECTS) and European standards of quality assurance. However, in reality both of the laws have been developed on the basis of respective laws of the Russian Federation and need to be amended and modified according to the latest requirements of the Bologna process and brought in consistency with European HE legislation.

The first official strategic document in the area of education in Armenia was the National Plan for Education Development for 2001–2005 approved by the RA National Assembly in June 2001. This plan from which only specific provisions were implemented did not envisage any activities for the implementation of the Bologna principles and did not have visible impact in terms of the development of the Bologna

¹ Yerevan State University

² Armenian Agricultural Academy

process in Armenia. The Higher Education Reforms Strategy of Armenia developed with the World Bank assistance and approved by the Government of Armenia in November 2003 was called to fill somehow this gap. It provides detailed analysis of the higher education sector of Armenia in terms of 6 initial action lines in the Bologna Declaration, substantiates the necessity for Armenia's joining to the Bologna process, and identifies main strategic issues of the Bologna reforms. Unfortunately, the document lacks description of reform strategies for specific action lines. Moreover, the document has become considerably outdated in its European Integration aspect and with the issues covered is not consistent with the latest developments of the Bologna process since the list of Bologna action lines (objectives) has been expanded to 10. The paper³ prepared with the support of UNDP contains also a concept on the Armenia's strategy of Bologna reforms some recommendations of which were later implemented. Current developments of the Bologna process are today guided by the timetable approved by the Protocol Decree of the RA Government⁴ containing specific directions on the implementation of the Bologna principles.

Overall study of the situation in the area of higher education, particularly, analysis of Armenia's 2 National reports on the Bologna process shows that the System is not ready completely to radical structural, programmatic, organizational changes necessary for the effective and full implementation of the Bologna principles. To be involved in the Bologna process HEIs need substantial information and methodical support. On the other hand, implementation of the Bologna principles requires specific legislative amendments and additions, as well as revision and updating of the referred Strategy on Higher Education Reforms based on the new challenges and priorities of the Bologna process. This is the purpose that this document is targeted to.

³ Yu. L. Sargsyan, "Reorganization of Professional Education System as the Main Driving Force for Innovative Development of Economy". Concept Paper (Plan) for Higher and Postgraduate Professional Education Reforms. Draft, p. 31.

⁴ Government of Armenia Decree No 43-N on Approving the Timetable for the Implementation of Principles of the Bologna Process in the Area of the RA Higher Professional Education dated November 02, 2006.

1.2. Main Goals and Objectives of the Document

a) Goals

- 1) Evaluate current situation of the higher and postgraduate professional education of Armenia in the context of the Bologna process.
- 2) Develop recommendations for updating the RA Strategy and legislative support for the Reforms of Higher and Postgraduate Education consistent with the main principles and objectives of the Bologna process.

b) Objectives

- 1) Conduct comparative analysis of the situation related to the Bologna process in Armenia and other Bologna signatory countries for the main action lines of the Bologna process.
- 2) Evaluate consistency of Armenia's current Reform strategy for the higher and postgraduate education and educational legislation in place with the current requirements of the Bologna process and reveal the needs for necessary changes.
- 3) Ensure information and methodical support to HEIs of Armenia in the implementation of the principles of the Bologna process.
- 4) Develop conceptual provisions and recommendations on the amendments and additions to the RA Strategy for Higher Education Reforms and RA Education legislation proceeding from the current requirements of the Bologna process.

1.3. Methodology of the Report

Comparative analysis of the current situation and progress of the Bologna process in EHEA and Armenia is made according to the 10 action lines (objectives) of the Bologna process each of them covering a specific area of the Bologna reforms:

1. Adoption of easily readable and comparable degrees (qualifications);
2. Adoption of a system based initially on 2 and now on 3 main cycles;

3. Establishment of a system of credits;
4. Promotion of mobility of students and academic/administrative staff;
5. Promotion of European cooperation in quality assurance;
6. Promoting European dimension in higher education;
7. Lifelong Learning;
8. HEIs and students;
9. Increasing attractiveness of the European Higher Education Area;
10. Doctoral studies and synergy between European Higher Education Area and European Research Area.

This Report envisages implementation of the following stages in terms of each action line:

- 1) Comparative analysis of the situation and progress, presentation of main events, changes and trends;
- 2) Identification and evaluation of factors preventing the Bologna process, legislative, organizational, resource issues, as well as unused opportunities and challenges for development;
- 3) Development of recommendations and conceptual provisions for the changes in current strategy and legislative documents for each specific Bologna action line;

During the analysis the authors have studied:

- Basic documents of the Bologna process;
- National reports of the Bologna member countries on the progress of the Bologna process;
- Higher education laws of the Bologna member countries and their amendments related to the Bologna process;
- Strategic documents for higher education systems in the Bologna member countries;
- Related publications of organizations (EU, EC, EUA, EUROASHE, UNESCO-CEPES, ENQA, etc.) participating in the Bologna process;

- Other materials related to the Bologna process.

2. Adoption of a System of Easily Readable and Comparable Degrees

2.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ On December 14, 2004 the National Assembly of Armenia ratified the Lisbon Recognition Convention.
- ❖ In May 2005 the National Information Center for the Recognition of Foreign Qualifications and Diplomas was established by the Government of Armenia Decree ensuring Armenia's participation in ENIC and NARIC European networks.
- ❖ Based on European prototypes the Armenian version of the Diploma Supplement⁵ was designed which is now in the stage of discussions. According to the timetable approved by the Government the Diploma Supplement will be officially introduced and provided to the students starting from 2007.
- ❖ A working group for the development of National Qualification Framework consistent with that of EHEA is operating in accordance with the directive of the Minister of Education and Science. According to the timetable approved by the Government⁶ it is anticipated that the National Qualification Framework will be introduced by 2009. By that time the draft will be widely discussed with all the stakeholders. In the frames of this project it is anticipated to establish qualification descriptors for each degree in accordance with the European Qualification Framework.

2.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ Development of the national qualification framework consistent with the requirements of the Bologna process (Berlin Communiqué) has not been commenced yet. Moreover, this term has not been defined and fixed in the education legislation of Armenia. In HEIs new Bachelor's, Master's and Researcher's degree programs were launched independently and without any coordination due to lack of system-wide standards.

⁵ Up to now the "Academic Transcript" has been in use (Law on Higher and Postgraduate Professional Education, Article 10)

⁶ Government of Armenia Decree No 43-N on Approving the Timetable for the Implementation of Principles of the Bologna Process in the Area of the RA Higher Professional Education dated November 02, 2006.

- ❖ State educational standards (general and field specific) established later do not contain clear-cut qualification descriptors and may not serve as sufficient basis for internal (inter-institutional) and external (inter-state) comparison and recognition of national qualifications and diplomas.
- ❖ New HE qualifications originating from the Bologna requirements were introduced without introduction of European Diploma Supplement which is also an obstacle for comparability and recognition of Armenian qualifications and diplomas in the European area.
- ❖ Hence, in Armenia there is no interconnection between the Bologna and Copenhagen⁷ processes and to be more accurate, the latter actually has not started yet.
- ❖ The development process of National Qualification Framework needs a specific legislative support in Armenia. This refers to the introduction of respective terms and definitions in the laws in place, determination of authorities for appropriate bodies, stipulation of requirements for the comparison of national qualifications with the EHEA Qualification Framework.

2.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Establishment of National Qualifications Framework

- ❖ According to the document⁸ approved by Bergen summit the Ministry of Education and Science is to establish a respective entity within its structure, i.e. qualification board or commission for the development of National Qualifications Framework guaranteeing that all the stakeholders (Ministries, HEIs and their staff, employers, students, etc.) are represented in that entity. The latter, in turn, will establish disciplinary Field committees. During the Framework development the Board and its Field committees must receive appropriate consulting from European experts.

⁷ A Framework for Qualifications of the European Higher Education Area. Bologna Working Group on Qualifications Frameworks. Ministry of Science, Technology and Innovation of Denmark. February 2005. 200p.

⁸ Ibid.

Annex 3 portrays the recommended structure and possible field committees of the entity responsible for the development of National Qualifications Framework and **Annex 4** illustrates an example of qualification framework for one of the fields (biology) prepared by Georgian experts.⁹

- ❖ The first step towards the establishment of National Qualification Framework is determination of its mission (main goals and objectives). It may be formulated as:
 - Description of interrelated qualifications (degrees, diplomas) existing in the country;
 - Ensuring easily readable and transparent qualifications for broader communities (entrants, students, employers);
 - Assistance to the HEIs in planning and implementing new study programs;
 - Support in quality assurance;
 - Ensuring compatibility and harmonization of national qualifications at international and EHEA levels.
- ❖ For ensuring compatibility and transparency of National Qualification Framework it is necessary to secure clear description of qualifications with the use of following notions:
 - Higher education cycles and respective academic qualifications (qualification degrees);
 - Student's workload in terms of credits;
 - Differentiation between the levels in the frames of the first cycle of higher education;
 - Learning outcomes with the description of required competencies.
- ❖ Qualification framework is pertinent to be developed in consistency with lifelong learning strategy. It would be appropriate to establish "*integral national qualification framework*" for the whole professional education system of the country (including, vocational education sector) that would be consistent with the concept of European Qualification Framework being developed for lifelong learning. It is important to

⁹ Main Directions and Action Plan for Implementing the Bologna Process in Georgia Until 2010. Tbilisi, 2005. 51p.

determine the role of so called short educational cycles within the national qualification framework and their relationship with the first cycle of higher education, i.e. with the Bachelor's degree.

- ❖ In accordance with the Bologna requirements¹⁰ to the national qualification frameworks it is necessary for the Armenian authorized body to implement self-certification process of the national Qualification Framework to check its consistency with the European Qualification Framework.

b) Introduction of European Diploma Supplement

- ❖ Development and introduction of a Diploma Supplement of a European Type is mandatory for all qualifications in order to ensure compatibility of national qualification framework in EHEA and stems out directly from the Bologna Declaration. It is appropriate to develop Diploma Supplements for different qualifications in parallel with the development of National Qualification Framework.
- ❖ The Diploma Supplement must indicate that the qualification is in harmony with the respective European qualification based on self-certification of the National Qualification Framework.

c) Recommendations on Amendments and Additions to the Current Legislation

- ❖ The list of main terms (Article 3) in the *RA Laws on Education and Higher and Postgraduate Professional Education* is suggested to supplement with the following terms:
 - *RA Qualifications Framework (RA Qualification Framework for Professional Education)*;
 - *Qualifications Framework for European Higher Education Area.*
- ❖ In the RA Law on Higher and Postgraduate Professional Education (Article 9) the requirements to the RA Framework for Higher Education should be legally fixed, i.e.

¹⁰ A Framework for Qualifications of the European Higher Education Area. Bologna Working Group on Qualifications Frameworks. Ministry of Science, Technology and Innovation of Denmark. February 2005. 200p.

formulation of mission and goals, description of qualifications in terms of levels, workload expressed in credits, learning outcomes (competencies), requirements for self-certification of national framework and its consistency with the overarching Qualification Framework of EHEA, etc. It would be preferable to set forth by the law the main rules for the establishment and approval of the Framework.

- ❖ It is recommended to indicate in the same law (*Article 10*) the need of Diploma Supplement for each qualification in accordance with European requirements.
- ❖ Except for making amendments and additions to the law it will be necessary to have some sub-legislative acts on the formation of the entity authorized for the national qualification framework, its field committees, procedures for the establishment and approval of the Framework.

3. Adoption of a System Based on Initially Two and Now Three Main Cycles¹¹

3.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ As stated in the Introduction the 2-cycle system, i.e. Bachelor's and Master's Degrees was commenced in Armenia at SEUA in 1992 much earlier than the official launching (1999) of the Bologna process. Later it was also introduced into the Yerevan State University (1995) and Armenian Agricultural Academy (1998). Operation of the American University of Armenia was commenced with the Master's Degree program (1992). In the referred institutions the transfer from the one-cycle higher education to 2-cycle one was implemented as an experiment on the basis of respective Government Decrees and own charters (regulations). The new Bachelor's and Master's qualifications were legally stipulated by the RA Law on Education in 1999.
- ❖ According to the Law on Higher and Postgraduate Professional Education (2004) and subsequent Government Decree the 2-cycle system was introduced in Armenia at the system level from 2005-2006 academic year securing comprehensive implementation of the respective requirement of the Bologna process. Concurrently, admission to the former study program for the diploma specialists was terminated while the status of respective Specialist's qualification was equalized to the Master's qualification.
- ❖ The Laws on Education and Higher and Postgraduate Professional Education provide favorable legislative basis also for the introduction of 3-cycle higher education system anticipated by the latest requirements of the Bologna process. The referred laws envisage provision of a Researcher's qualification at the completion of 3-year postgraduate education which in terms of Bologna is the third cycle of the 3-cycle higher education system. Generally speaking the legislative framework in place in Armenia is sufficient for the structural reforms of higher and postgraduate education led by the Bologna principles.

¹¹ "Adoption of a system based mainly on two cycles"

3.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ It should be underlined that formation of Bachelor's and Master's Degrees very often has been of formal nature and respective curricula, as a matter of fact, have been created through mechanical dividing in 2 parts of 5-year curricula for diploma-holding specialists. In terms of contents autonomous entry of 2 cycles to the labor market has not been secured since structural changes have not been accompanied by necessary curricular changes. As a result, the first cycle, i.e. Bachelor's degree program was substantially undermined and often is perceived as "spring-board" for the entry to the second, i.e. Master's degree program. There is evident need for radical curricular reforms based on the needs and demands of the labor market.
- ❖ The newly developed curricula are not consistent also with EHEA curricular standards, particularly, from the viewpoint of compatibility of learning outcomes. As a matter of fact, curricula do not have modular structure and clear-cut qualification descriptors. As it was already stated, the HE system lacks yet a Qualifications Framework compatible with the EHEA Qualification Framework while its urgent development is a precondition for effective implementation of curricular reforms.
- ❖ The low rating of newly-established Bachelor's qualification is somehow conditioned also with the definition set out in the Law on Education, "*Bachelor – qualification degree of higher professional education conferred to persons having secondary (complete) general education and assessed for at least **4-year** higher professional education program*"¹². Accordingly, Bachelor's Degree is sometimes perceived as a qualification of lower level than that of a specialist provided with a former 5-year education diploma, "*...conferred as a result of **5-year** higher professional education*"¹³ and interpreted mainly as a starting point for further education at higher levels. The referred is a very acute problem also in the whole Europe. As stated Bachelor's Degree (particularly with a 3-year duration) does not have enough demand in the labor market. That is why the Bergen Communiqué clearly states, "*... in order to improve employability of graduates with Bachelor's Degree there is need for broader dialogue with the involvement of governments, institutions and public participants*"¹⁴.

¹² Republic of Armenia Law on Education (adopted on April 14, 1999), Article 3.20.

¹³ Ibid, Article 3.21.

¹⁴ "The European Higher Education Area - Achieving the Goals" - Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005. 6p.

- ❖ In Armenia's higher education system exist all the transitional problems, challenges and needs typical to EHEA. There are no clear-cut common principles and methodology for the development of Bachelor's and Master's programs while the available state education standards do not fill the gap. While the Bachelor's program is very often considered as an equivalent substitute to the program for diploma-holding specialist in terms of its contents then in case of Master's program, as a matter of fact, are not clarified the program outcomes, scopes and orientation of specialization. Sometimes it is perceived just as 2-year supplement to the first 4-year cycle which leads to unavoidable duplications or is interpreted as an opportunity to extend the period of professional education. The relationship between the contents of 2nd and 3rd cycle degree programs is not also clarified.
- ❖ Awareness of the public (entrants, students, parents, academic staff, employers) on newly created HE programs and respective qualifications often is not sufficient.

3.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Structural Issues on Transition to 3-Cycle System of Higher Education

- ❖ It is worth of seriously discussing the possibility of diversification (decoupling) of Bachelor's (Master's) programs and respective qualifications as professional and academic ones in the frames of 1st (2nd) cycle. It is appropriate to have differentiated approach towards this issue taking into account the specifics of respective disciplinary areas and anticipated impact of "professional" degree on the employability of potential graduates.
- ❖ The issue of distinction between the internal levels of the 1st cycle should be also considered. This refers to "*shortened*" cycles (1,5...2 years) of professional education developed in EHEA that are completed with respective qualifications. In our opinion, this issue should be addressed during the development of qualification framework for the whole professional education system considering the "*shortened*" cycles as additional opportunity for learning and career advancement.

b) Curricular Reform Targeted at Improving Employability of Graduates and Harmonization with European Standards

Structural reforms of higher education aimed at transition to 3-cycle system should be accompanied with curricular reform targeted at increasing employability of graduates and effectiveness of learning. Some strategic issues of curricular reforms are indicated below.

- ❖ Raising *economic relevance of study programs*, matching their scopes and contents with the current demands and needs of the labor market is a critical issue now. Firstly, this implies revision of lists of specialties (majors) for all the 3 cycles with the aim of matching them with the demands of the labor market and broadening their scope. This process has already started in some HEIs of Armenia but, unfortunately, it is not of a systemic nature and current nomenclatures of specialties are still formed based on proposals of specific HEI's.
- ❖ In restructuring and updating curricular contents qualification descriptors for specialties (disciplinary areas) should serve as a basis. They should be set based on the learning outcomes clearly formulated in measurable competencies, skills and knowledge that are to be generated during learning of the study program. As it was already stated, qualification descriptors will be developed within the development of National Qualification Framework taking into consideration the requirements of EHEA Qualifications Framework.
- ❖ Compatibility and synchronization of contents, qualification descriptors and graduation/assessment requirements for study programs of 3 cycles (Bachelor's, Master's, Researcher's) become highly important for the development of 3-cycle higher education structure, as well as matching of admission and graduation criteria between successive programs. This is one of the key aspects of curricular reforms and will require synchronous restructuring of all 3 degree programs.
- ❖ Another critical dimension for programmatic reforms is improved flexibility and manageability of programs with using as the main tool their modularization, i.e. reasonable and purposeful grouping of courses. It aims to provide alternative opportunities for learning, helps the students to participate actively in the planning of their learning process. However, modularization remains one of the most challenging issues of the Bologna reforms; there are diverse interpretations of this process, no

common approaches and guidelines are available by now. It is very important to define correctly the size and format of the modules for which joint discussions and dissemination of best practices in specific HEIs might be quite helpful. It is worth-mentioning that modularization is directly related also to the introduction of credit system where the first step is development of modules.

- ❖ A critical factor for the success of curricular reforms is establishment of feedback from the labor market (potential employers), involvement of employers in the curricular review process and using of its results in restructuring of curricula. Employers must also participate in the development and evaluation of qualification descriptors. Establishment of such cooperation will enable also to evaluate the impact of curricular restructuring on employability of graduates which is the main target of curricular reforms.
- ❖ For the success of reforms it is very important to have a clear and purposeful methodology for restructuring of current curricula that would take into consideration and combine the main requirements to the study programs. Below an exemplary scheme is presented for developing a modern study program, which implies the following succession of steps:
 - 1) Define the set of working skills and competencies typical for the specialty;
 - 2) Formulate learning outcomes (qualification descriptors) for the given study program;
 - 3) Divide the program into a number of modules (basic, humanities, communicative, etc.), define outcomes for each module;
 - 4) Assign certain number of credits to each module (percentage to the total) proportional to its role in the formation of outcomes;
 - 5) Divide each module to specific course units (mandatory and elective), formulate learning outcomes for each unit based on overall outcomes of the respective module;
 - 6) Attach specific number of credits to each course unit proportional to its effect in generating outcomes of the respective module;

- 7) Identify teaching and evaluation methods most suitable for the certain course unit, clarify all components of its teaching (lectures, laboratory practice, course projects, etc.);
- 8) Split the lecture component into the units, formulate its output results as well as student workload within the workload allocated to the whole unit.

c) Recommendations on Amendments and Additions to the current legislation

- ❖ In the new 3-cycle higher education system the current postgraduate courses (aspirantura) are considered to be the third cycle of higher education. In this regard the term “*post higher education*” used in respective legislative acts loses its meaning and in terms of its correspondence with the terminology of the Bologna process it is appropriate to stop its further usage. Implementation of this recommendation will require a number of modifications in the RA Laws on Education and Higher and Post higher Professional Education.
- ❖ In Article 3 of the RA Laws on Education and Higher and Post higher Professional Education it is suggested to revise the definitions of “*higher professional education*”, “*post graduate education*” and “*postgraduate student (aspirant)*”.
- ❖ It is necessary to revise p.2 in Article 9.2 and remove p.3 from the same Article.
- ❖ It is necessary to synchronize the 2-level system of Armenia’s scientific degrees with 3-level structure of higher education qualifications.

We will come back to this issue in Section 11 of this Report.

4. Establishment of a System of Credits

4.1. Situation in Armenia: Main Results and Progress Indicators

a) Legal and Methodical Basis for Establishing Credit System in Armenia's Higher Education System.

- ❖ Despite the fact that still on December 14, 2004 Article 26.5 of the RA Law on Higher and Postgraduate Professional Education envisaged that “*Mandatory implementation of credit system into the higher education system shall start from 2006/07 academic year*”, nevertheless, due to actual unreadiness of HEIs of the system the Ministry of Education and Science came up with the initiative of making legislative amendments shifting the start of introduction of credit system to 2007/08 academic year (adopted by the National Assembly on July 07, 2006). The completion date of the process remains open.
- ❖ On December 22, 2005 the Government of Armenia adopted a special Decree on Introducing Credit System into the Higher Education System of Armenia. Although 3 clauses of the Decree stipulate a list of systematic measures for passing to the credit system in HEIs there are no timeframes (timetable) set for their implementation. At the moment measures indicated in the Decree mainly have not been implemented. Particularly, majority of HEIs (with exclusion of SEUA, YSU, YSEU, ARSU) have not started the implementation process from 2007/08 (clause 1), 6 state HEIs involved, except of SEUA, in the pilot (YSU, YSLU, YSAU, ASPU and YSEU) did not introduce credit systems in their programs in the 2005/06 academic year, hence they were not able to summarize outcomes of the pilot stage as well (clause 3a). Directions of the Decree on the procedure of organizing education with the application of credit system (clause 3b), credit transfer timetable (clause 39c), development of new educational standards and new curricula with credit framework (clause 3d), development of respective legislative amendments package (clause 3c) have not been implemented yet or are in the process of implementation. Perhaps some steps have been taken for the implementation of clause 3e, i.e. “*organize retraining for academic administration staff and teachers of HEIs ...*” but this is not enough since there was no coordinated training program while seminars and workshops organized for this purpose were of fragmented and not linked. The role of SEUA was

substantial in this process. The institution was actively participating in the events sharing outcomes of its 5-year experience and providing specific recommendations and assistance.

- ❖ Clause 4 out of the 10 clauses of the *Government of Armenia Decree No 43-N on Approving the Timetable for the Implementation of Principles of the Bologna Process in the Area of the RA Higher Professional Education* dated November 02, 2006 is related to the credit system. Although specific timeframes (timetable) and responsible parties are indicated in this Decree, nevertheless, the list of actions does not list comprehensive and interconnected measures; by the way, some very important measures envisaged in the previous Decree (December 12, 2005) and not implemented yet are not indicated.
- ❖ In order to correct the situation the Ministry of Education and Science established a joint task force consisting of representatives from HEIs and Ministry of Education and Science in January 2007 to develop *Action Plan and Some Normative and Methodical Documents for the Implementation of Credit System in Higher Education System of Armenia in the Period 2006/08*. The task force developed a program of complex measures consisting of 15 actions called to compensate considerably the abovementioned lacks. Particularly, a normative framework corresponding to ECTS requirements (annual workload for study program, workload of the student and hour equivalents of ECTS credits, etc). The working group has revised essentially the draft regulation *Procedure on Organizing Education Process in HEIs with the Use of Credit System*, activities are being conducted for restructuring curricula according to credit system and preparation of a methodical Guide for assigning credits to educational modules.
- ❖ National information Center for Academic Recognition and Mobility (ArmENIC) has translated the ECTS *Guide* into Armenian and currently it is in the process of publication. The Armenian sample of European *Diploma Supplement* has been also prepared.

b) Status of Credit System Implementation in HEIs of Armenia

What has been done in Armenia's higher education system and what is the level of HEI's readiness to such a radical transition in the organization of education?

- ❖ The American University of Armenia (AUA) was the first institution which since its establishment in 1992 used the credit system as the framework for organization of education, i.e. as accumulation system. But it should be stated that this example is not typical for Armenia's higher education system as AUA is mainly functioning in American legal education framework and credit system in use there is based on classroom/contact hours, i.e. is not compatible with ECTS. By the way, AUA was the first among the higher education institutions that through a multi-phase evaluation process was accredited by WASC¹⁵, American Regional Accreditation Commission, enabling the AUA to initiate credit transfer activity with other institutions accredited by WASC. It is appropriate to develop mechanisms for credit recalculation and transfer between the AUA and HEIs of Armenia since AUA's main Master's Degree program is basically supplied by the graduates from Armenia's HEIs which increases importance of the issue of assessing and recognizing of previously achieved learning outcomes.
- ❖ Another HEI where partial application of an ECTS compatible credit system at the level of certain study programs, pilot clusters of specialties and departments has been tested for already five years is SEUA. The first experiment with credit system has started here still in 2002/03 academic year when in the frames of a project implemented with the financial assistance of Open Society Institute Assistance Foundation (OSIAF) the new system was introduced and tested within the Master's Degree program for 2 major specialties. In the following 2003/04 academic year the credit experiment was extended over the whole Researcher's (Doctoral) Degree program in the frames of another project funded by the OSIAF. In 2004/05 academic year due to a new grant of the OSIAF the credit system was introduced also in the SEUA Bachelor's Degree program in Foreign Students Division. According to the timetable approved by the Academic Counsel of the SEUA implementation of the credit system in the Master's Degree program of the University was finalized in 2006/07 academic year. Currently, over 1000 students of SEUA study in all 3 degree programs within ECTS credit system. Implementation of credit system in Bachelor's Degree programs is planned to complete in 2010/2011 academic year.

¹⁵ Western Association of Schools and Colleges / Accrediting Commission for Senior Colleges and Universities

- ❖ Activities have been conducted also for the dissemination of SEUA's credit experiment results in the RA higher education system. For instance, 3 university consortiums which have been created with the sponsorship of OSIAF conducted activities for the development and implementation of credit based joint study programs and mechanisms for the transfer of academic credits between institutions in 2005/06 academic year. Within one of the projects a number of students of different HEI's of the Consortium studying the same specialty in Master's degree program along with the accumulation of academic credits had a chance to transfer them from institution to institution within university consortium "SEUA-YSU-YSIE". Due to the other joint project students involved in a Master's degree program at SEUA have been able to transfer certain number of credits from the Russian-Armenian State University to their credit accounts in SEUA.
- ❖ Organization of learning process based on academic credits alongside with curricular changes requires structural and organizational changes required by the rational of credit-based flexible study programs and the transition from fixed academic groups planned for the whole duration of study programs to variable subject based student flows (cohorts). Particularly, for the implementation of this reorganization SEUA has established *Office of Academic Registrar* - a new structure for academic management in the higher education system of Armenia.
- ❖ In order to ensure operation of such offices and facilitate usage of credit system within the referred projects a computerized systems for *Online Registration for Courses* and *Student Records Management* were developed and introduced during 2002/06 enabling the students to register online in courses selected by them and to help the *Academic Registrar's Office* to manage the registration process in an operative manner.
- ❖ Since 2002 the SEUA publishes and provides to students and postgraduates on annual basis the *Manual/Guide to Credit System and Course Catalog* as well as quarterly published *Timetable for Courses and Exams*.
- ❖ Despite the SEUA's progress in the implementation of credit system there are also some difficulties and problems in the system that need to be addressed. Specifically, the institute for academic consultants is not fully developed yet, their rights and responsibilities are not clarified, there is no clear procedure for organizing the

learning process according to credit system, etc. There are also problems of only subjective nature, including certain inertness of administrative and teaching staff and in some cases also their internal confrontation to innovations, lack of interest and sometimes even indifference of considerable part of students to participating in the planning of their individual learning programs, etc. Generally speaking, credit reform in the university goes so far in top-down direction and does not have tangible support from students and teachers yet.

- ❖ Experience of other HEIs, specifically YSU, YSIE and RASU, related to credit transition is not extensive and is mainly of preparatory nature since the system was introduced in these HEIs only from the 2nd semester of 2005/06 academic year only for one Master's specialty and with the involvement of very limited number of students. Implementation of credit system in YSU is planned to complete in 2008/09 and in YSIE – in 2010/11 academic year.

4.2. Preventive Factors of the Process, Existing Problems and Needs

Problems hindering implementation of credit system in HEIs of Armenia are diverse main part of them being conditioned with “rigid” learning plans and dominance of teacher-centered methods of instruction inherited from the Soviet system. Traditionally they considered the student just as an object of the educational process leaving no room for their participation in the planning of that process. Another set of factors is conditioned with the relatively high level of isolation of the system from the outer world. Let's mention only those that are central:

- Awareness on the new opportunities that might be provided by the credit system in terms of improving quality of learning, enhancing educational process and resource saving is still low in HE system;
- Unjustified big number and fragmentation of specialties (disciplines) in the higher education, and in many cases lack of their demand in the labor market;
- Lack of experience to develop modern study programs based on clearly defined learning outcomes and competencies as well as student workload;

- Lack of clearly grounded and practically tested methods and mechanisms for assigning credits to courses and other educational modules. Credits are not used as a tool for measuring student's full workload yet; they rather measure only classroom hours (teacher's workload);
- Absence of teaching and examination methods adequate to the essence of credit system and methodical including electronic resources supporting self learning;
- Lack of international consultancy and HEI's cooperation addressed to implementation of ECTS in HEIs;
- Absence of internationally recognized quality assurance systems (internal and external) will prevent later to the credit transfer between the institutions, especially from Armenia to Europe;
- Our institutions do not use yet (except for SEUA) Electronic Information Systems of Academic Management for electronic registration and processing of student academic records.

There are also less important factors of practical nature that hinder the process:

- 17-week duration of semesters specified by current state standards;
- Mandatory introduction of a non-standard 8-week graduation semester;
- Difficulties in planning of academic workload of chairs and specific teachers;
- Risk of mechanical fragmentation of academic programs in result of modularization;
- Freedom of choice among the wide variety of courses may break the integrity of study programs turning it to a poorly linked set of courses;
- Simplification of modifying study programs may endanger their sustainability making them hard manageable.

4.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Recommendations on Activities/Measures Supporting the Credit Transition

- ❖ Broadening of higher education specialties (disciplines), harmonization of their titles and outcomes (qualification descriptors) with EHEA criteria;
- ❖ Development of methodical base for restructuring study programs with credit framework and assignment of credits to course modules;
- ❖ Initiation of training program, organization and delivery of seminars and workshops for academic administration and teachers of HEIs to prepare them for the transition to credit system;
- ❖ Radical restructuring of curricula addressed to their modularization and description in terms of credit values expressing students full workload;
- ❖ Reorganization of current management systems of educational process in line with the requirements of credit transition, particularly, establishment of registry offices, other student support services based on the institute of study advisers and modern technologies (electronic registration, electronic academic bulletins, special programs for learning planning and performance evaluation for new students, etc.);
- ❖ Development and implementation of a web-based unified national software package for course registration of students and management of their academic data;
- ❖ Regular monitoring and evaluation of quality and effectiveness of implementation of credit system by the MES with the involvement of international experts;
- ❖ Financial support is required for the replication and implementation of ECTS system.¹⁶

b) Recommendations on Amendments and Additions to the Current Legislation

- ❖ Definitions of terms related to credit system in the Law on Higher and Postgraduate Professional Education need to be revised and modified (*Article 3*) according to

¹⁶ Credit Accumulation and Transfer System in Tertiary Education. Final Report to the Ministry of Education and Science of Republic of Armenia. By Dr. John W. Shumaker. October 8, 2006. 28p.

ECTS official terminology. It should be stated that in some European laws of latest generation¹⁷ instead of giving direct formulations of respective terms reference is made to the documents where the terms originate from.

- ❖ It is recommended that besides specifying the duration of a study program to define total number of ECTS credit units required for each qualification in *Article 4* of the same law. It would be desirable to indicate that one academic year for a study program with full workload equals to 60 ECTS credits.
- ❖ It is proposed that the law fixes also the conditions of organizing main study programs with part-time studies eliminating or alleviating restrictions on the duration of study program and granting qualifications according to the number of credits required. It is necessary to define also the status, rights and responsibilities of a student studying part-time.
- ❖ Sub-legislative (regulatory) framework related to credit system must also undergo considerable changes targeted harmonization of annual student workload norms in the state educational standards of higher education with that of the European countries, defining hour equivalents of credits, regulation of credit based organization of studies, establishing normative basis for payment of tuition fees according to the number of course credits assigned to student, etc.

¹⁷ Law # 2002/3 On the Higher Education in Kosovo, 2003. 27p.

5. Promotion of Mobility for Students and Academic/Administrative Staff

5.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ International mobility of Armenian students and teachers is not coordinated. As a matter of fact, it is not organized and managed at institutional level often leading to problems related to official recognition of study periods (cycles) or courses studied abroad and received grades. Such mobility is mainly initiated personally by students or teachers participating in mobility programs funded by different international organizations and foundations under grants or scholarships. There are several types of external mobility:
 1. Based on bi-lateral intergovernmental agreements, quotas are allocated to Armenia to study abroad and our students visit mostly Russia, Ukraine, China, Eastern Europe and some eastern countries to receive higher education. This process is organized and coordinated by the MES;
 2. Another option are education grants and scholarships provided by international organizations and foundations, including IREX (US), American Councils (US), Open Society Institute Assistance Foundation (US), DAAD (Germany), British Council (UK) as well as the US and some European governments aimed at providing opportunity to gifted young people to get higher and mostly Master's level education at foreign educational institutions. Another type of this option are short-term mobility programs for students, teachers and administrative staff supported by TEMPUS and other programs of international/European inter-HEI cooperation;
 3. Finally, the third option is academic mobility as a result of direct contacts of individual students with foreign HEIs and funded by own means or scholarships provided by the hosting HEI.
- ❖ There is almost no *horizontal* academic mobility in terms of taking planned study periods (semester or academic year) at foreign (or local) HEIs in the frames of given study program with the transfer and official recognition of outcomes of specific courses and modules by the sending HEI as an integrated component of the program. Very limited student mobility is mainly *vertical*, i.e. is targeted to achieving a

new qualification/degree. In exceptional cases when students manage to spend a limited period of time (usually one academic year) at foreign HEIs as a matter of fact they have to take academic leave or pause in their education, which contradicts the principles of academic mobility set forth by the Bologna process.

Internal mobility is also mainly *vertical* and very restricted with student flow mainly from Iran, India and some other Arab countries. Internal mobility is relatively higher than external mobility.

- ❖ Since 2005 ArmENIC has become a full member of ENIC/NARIC network. According to the charter of ArmENIC it has an authority of taking official decisions on the recognition of qualifications, concurrently, it performs also information and consultancy functions. Recognition procedures used by ArmENIC are consistent with the principles of Lisbon Convention. It has developed the *National Plan on Actions of Mutual Recognition* and the already mentioned Armenian version of Diploma Supplement consistent with the format and requirements of EU/CoE/UNESCO, which assumingly will be provided to all students in English and Armenian languages free of charge.

5.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ European mechanisms and programs (*Erasmus*, etc.) promoting international student mobility are not functional in Armenia. Armenian HEIs are not involved in international exchange programs being isolated from the European processes of arranging academic mobility and lacking own resources and programmatic instruments for such arrangements. Limited resources provided by international projects cannot remove this gap. Documents like European Diploma Supplement, Learning Agreement and Academic Transcript required for mobility are not used by HEIs of Armenia yet. Experimental implementation of ECTS does not have yet substantial effect on intensification of mobility based on bi-lateral or multi-lateral agreements.
- ❖ There is almost no accurate statistics on mobility, particularly on teacher and researcher mobility. However, according to tentative statistics of the MES¹⁸ about

¹⁸ Bologna National Report of Armenia for 2005-07, Yerevan, 2006. 10p.

10% of students and teachers from HEIs are being involved in different academic mobility programs every year. Probably this data needs to be checked and corrected.

- ❖ The traditional diploma insert in use that is mandatory provided together with the diploma is in Armenian does not contain information required to promote international mobility.
- ❖ Instead of incentives for student, teacher and administrative staff mobility there are restrictions and obstacles of legislative and legal,¹⁹ curricular and simply psychological nature in Armenia. The current organizational model of educational process strictly regulated by rigid curricula and structure of current study programs restricts transfer of students from one specialty to the other and from institution to institution even in Armenia and does not provide alternatives for acquiring specialty and qualification. The well known European mechanisms for promoting international student mobility do not work in Armenia, while transfers to foreign HEIs in the frames of bi-lateral agreements are limited.
- ❖ Shortage of financial resources, language and cultural obstacles, lack of clear-cut mechanisms for recognition of qualifications, lack of portable student grants and scholarships, risk of brain-drain, lack of state funding for teachers international visits, strict visa regime between EU and non-EU member states participating in the Bologna process, restrictions of mandatory military service for male students, etc. are considerable factors impeding mobility.
- ❖ In reality limited *horizontal* mobility is only in one direction, i.e. abroad (Europe and US). Lack of interest towards Armenian HEIs is conditioned with low attractiveness of study programs offered by them, shortage of information and lack of infrastructures meeting the international standards.

¹⁹ Regulations on Students transfers from One HEI to the Other approved by Government of Armenia Decree No 1112-N dated July 14, 2005

5.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Measures Targeted at Promoting Mobility

In order to create favorable conditions for restricted inter-institutional transfer and expanded international mobility for Armenian students it is necessary to implement comprehensive measures both in key HEIs and in the whole higher education system at legislative and organizational levels. Below are some of the possible measures:

❖ Mobility from Armenia to Europe:

- Develop and implement measures for promoting expanded participation of students from Armenia's HEIs in the mobility programs of European Community defining strict requirements for students return;
- Quick approval and introduction of Armenian version of European Diploma Supplement in Armenia's HEIs;
- Develop and introduce Armenian version of ECTS information package (course catalog) and other tools for promoting student mobility (application form for mobile student, trilateral learning agreement and academic transcript);
- Appoint national ECTS/DS²⁰ consultant/s, establish respective institutional structures with the aim of maximum expansion of information provision on mobility opportunities in European (and not only) HEIs to students and teachers;
- Consider specific period or practice in a foreign country as a necessary component of academic program. Mobile students must have guarantees for official recognition of courses taken abroad (including grades) by their HEIs. With this respect the role of ECTS learning agreement and academic transcript are very important. The latter is a document of standard format containing all the learning components and results of a mobile student. It is necessary to develop and implement common software in HEIs that will automatically generate academic transcript of a student based on academic information available in the database;
- Establish and implement joint study programs (especially Master's Degree programs) in partnership with European schools;

²⁰ Diploma Supplement

- Diversification of funding sources for mobility, particularly, establishment of a foundation or grant program promoting mobility at national level via providing scholarships to gifted students and postgraduates to study at advanced European HEIs for one or more semesters. Here privilege should be given to participants of joint programs serving as a stimulus for the development of such programs;
- Ensure collection of accurate statistics on student, teacher and researcher mobility at institutional and HE system levels. For this purpose perhaps it would be reasonable to collect and provide the MES with data on international student and teacher mobility alongside to information on students local transfers within the institution;
- Strengthen teaching of foreign languages and evaluate learning outcomes based on internationally accepted testing standards. It would be reasonable to conduct teaching of some courses in English, particularly at second and third cycles of higher education.

❖ Mobility from Europe to Armenia:

- Establish special study programs (particularly, at Master's degree level) tailored for European students specifically in the areas where Armenian institutions have particular strengths and capacities/competencies to offer (Armenian Studies, Armenian History, Mathematics, Physics, etc.);
- Information support to foreign students interested in mobility programs, including development of institutions' websites in English, publication of printed and electronic versions of the ECTS information package (Course Catalog) in English;
- Improve educational and other support services provided to foreign students in Armenia, particularly delivery of special courses in Armenian, provision of consultancy on the selection of study programs and courses, improvement of subsistence conditions; administrative support, etc.

❖ "Internal" mobility:

- Issues related to student mobility programs between the HEIs of Armenia and recognition of their outcomes are to be regulated with the application of the same mechanisms as in case of international mobility, i.e. with use of ECTS mobility

tools (application form for mobile student, learning agreement and academic transcript);

- It is desirable to introduce best practices of European inter-institutional joint study programs in implementing joint programs between Armenian HEIs aimed at awarding the joint degrees. This will allow establishing of open, transparent and competitive educational environment.

b) Recommendations on Amendments and Additions to the Current Legislation

In order to remove current legislative and regulatory obstacles a package of legislative amendments should be developed to simplify the transfer of students and their academic records (credits) from institution to institution as well as from specialty to specialty within the same institution, and international mobility. Let's review the current legislative framework related to this sector.

- ❖ Article 4 of the RA Law on Higher and Postgraduate Professional education, which is related to the state policy in the area of higher education also emphasizes requirement of compatibility and recognition of Armenia's higher and postgraduate education qualifications and diplomas in European and other foreign countries (p. 5) and promotion of international student mobility (p. 6). Article 5 of the same law related to objectives of state policy in the area of higher and postgraduate professional education among other issues indicates development of international research cooperation and promotion of its development (p. 3). Article 17 of the Law states that *“students and postgraduates of HEIs ... may at their own discretion ... move to another HEI (including that of other countries) ...”* (clause 1) and *“... study any other course taught by that or any other HEI”* (clause 3-3).

But the referred provisions of the law are of declarative nature and are not supported by respective organizational mechanisms, necessary regulatory, procedural documents. Moreover, current systemic documents and internal regulations of HEIs related to the issue are often not consistent with the principles declared in the law.

- ❖ Regulations on Students Transfers between HEIs approved by the Government of Armenia Decree 1112-N adopted on July 14, 2005 regulates transfers of students from one Armenian HEI to the other and from foreign institutions to Armenian HEIs.

The Regulations do not stipulate anything in relation to transfers of students from Armenian HEIs to foreign ones, opportunity for studying over a specific period of time (semester, academic year) at foreign schools and official recognition of their learning outcomes, i.e. opportunities of international mobility specified by the law.

As a matter of fact, the Regulations should establish mechanisms for transfers and mobility authorized by the Law on Higher and Postgraduate Professional Education, whereas, they strictly restrict transfer of students between HEIs leaving the right of final decision at the discretion of the administration of relevant HEIs. It is suggested to essentially review provisions of the Regulations and bring them in conformity with the principles declared in the law and requirements of the Bologna process on promotion of international student mobility.

6. Promotion of European Cooperation in Quality Assurance

6.1. Situation in Armenia: Main Results and Progress Indicators

a) Current Legislative Framework

- ❖ State professional education standards are accepted to be the criteria for quality assessment by the RA Law on Education. The standards are developed and ratified by the Government of Armenia (Authorized State Body) for all HEIs without taking account of their specifics, strategic goals and operational context. Besides, these standards define specific normative requirements only to the minimum content of study programs and general knowledge level of their graduates and do not make any reference to HEIs performance efficiency in general.
- ❖ Article 42 regulates the state accreditation process and Article 43 – state control over the quality of education (p. 1÷3 and 5).
- ❖ Provisions of the law on the entity conducting accreditation and certification (licensing and accreditation service) are not consistent with the EHEA standards of quality assessment and assurance, proven experience and terminology in some important aspects.²¹ For instance:
 1. Accreditation Service is not independent in its functions since accreditation procedures are set by the Government (Authorized State Body) and decisions taken by the Service may be influenced by a third party (government, Authorized State Body);
 2. Accreditation is not conducted on regular basis, accreditation certificate is provided to HEIs without time-limitation.
- ❖ RA Law on Higher and Postgraduate Professional Education (December 2004) contains several articles on the quality of higher education. Particularly, Article 11 defining HEIs objectives in p. 4 indicates among them quality assurance in education

²¹ Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions. UNESCO/CEPES Papers on Higher Education, Bucharest, 2004. 84p.

and implementation of internal quality improvement system. Article 13.3. (p.p. 1÷12) presents main principles for state accreditation of HEIs and their study programs.

- ❖ P.2 of Article 21 of the Law (related to authorities of government Bodies in the area of Higher and Postgraduate Professional Education) defines powers of the Authorized State Body (MES) in the area of quality assurance, including:
 - Development and approval of state education standards;
 - Quality control;
 - Establishment of regulations on the implementation of education quality assurance process at HEIs.

The last provision also contradicts the ENQA Standards and Guidelines established for internal quality assurance within HEIs by ENQA according to which issues related to internal quality assurance and establishment of respective procedures are solely within the authority and responsibility of HEIs.

- ❖ Article 22 of the Law regulates quality assurance and state control over the higher and postgraduate professional education. It does not imply establishment of internal quality assurance structures and systems as well as participation of students and international experts in the quality assurance processes envisaged by the ENQA.

b) External Quality Assurance Processes

As opposed to many European countries where different quality assurance systems available are to be simply adjusted to general quality requirements/standards of EHEA the former Soviet countries, including Armenia must build their national quality assurance systems from the very beginning in conformity with those requirements. Below we discuss the progress in this area.

- ❖ In accordance with the Law on Education in 1999 Armenia established an official system for licensing and accreditation of HEIs. As it was already stated the Licensing and Accreditation Service functions as separate entity within MES and performs only part of functions of quality assessment and assurance – state licensing and accreditation of HEIs (so far private institutions only) based on the assessment (accreditation) of their specialties. Procedures and criteria of

assessment and accreditation in place are not consistent with ENQA quality assessment/assurance standards used in EHEA. Accreditation that is mandatory only for state HEIs and medical specialties is carried out only by the applications of HEIs and is not aimed at improvement of quality/effectiveness of higher education, accountability of HEIs or protection of consumers (stakeholders) interests. The only objective that it has served by now is accreditation of non-state HEIs motivated by the right of providing state type diploma.

- ❖ 5 out of 10 points of the referred *Decree No 43-N on Approving the Timetable for the Implementation of Principles of the Bologna Process in the Area of the RA Higher Professional Education* deal with quality assurance where the following 3 are indicated as main measures:

- 1) Establishment of National Service (Agency) for Quality Assurance, April 2007;
- 2) Development of a concept for quality assessment and assurance system, July 2007;
- 3) Joining the European Network/Association for Quality Assurance (ENQA), 2007-2008.

To develop a plan of measures related to point 2 of this Decree as well as a necessary package of documents for the implementation of requirements of the RA Law on Higher and Postgraduate Professional Education a Working Group was established at the MES (November 28, 2006) which had to complete its activities by June 2007.

For the implementation of p. 1 of the Decree related to the organization of the National Quality Assurance Service another task force was established by a Decree of the MES Minister (February 26, 2007). Based on the study of Armenia's legislative/regulatory framework for quality assessment and assurance in place and analysis of the experience of European quality assurance/accreditation agencies a number of concrete proposals and recommendations have been submitted (area of activity, legal status, level of independence, main goals and objectives, funding, etc.) to prepare the creation of National Agency for Quality Assurance matching with ENQA standards.

- ❖ Currently, out of 70 non-state HEIs 12 are accredited partially (at the level of specific programs) and 34 more – completely (at the institutional level). State HEIs are not

accredited yet. In 2007 the American University of Armenia was accredited by US WASC²² Accreditation agency, thus becoming the first HEI in Armenia and region having international accreditation.

c) Internal Quality Assurance Processes

- ❖ Armenian HEIs do not have appropriate structures, procedures and criteria yet to implement regular and standard functions of internal quality assessment and improvement. This is mainly explained by objective reasons the most important of them being:
 - Lack of necessary legislative framework for internal quality assurance;
 - Lack of internal culture and appropriate traditions.
- ❖ Over the recent years some HEIs have taken specific actions for the establishment of their own quality assurance systems. For instance, with the funding of OSIAF-Armenia 4 HEIs of Armenia – State Engineering University of Armenia, Yerevan State University, Yerevan State Medical University and Vanadzor State Pedagogical University – have implemented a pilot project aimed at establishment of own internal quality assurance systems. However, it should be noted that the process is still in its initial stage, does not have system-wide reach while the projects apparently need international expert support.
- ❖ Concurrently, it should be stated that some elements of quality assurance/assessment inherited from the Soviet system remain in use. Analysis of internal quality assurance and control processes within Armenian HEIs has revealed their main principles, components and instruments also reflecting the level of consistency with the ENQA requirements. Let's study situation with the internal quality assurance processes in Armenia's HEIs according to the main 7 standards set by ENQA.
 1. *Policy and procedures for quality assurance.* They are lacking in all the HEIs in Armenia, probably with the exception of American University of Armenia.
 2. *Approval, monitoring and periodic review of programs and awards.* The following elements are partially available:

²² Western Association of Schools and Colleges – One of the 6 accreditation associations in the US.

- Study plans consistent with state educational standards;
 - Their external review;
 - Approval of curricula by Methodical Program Commissions and Scientific Boards of HEIs;
 - Mechanisms for the approval of course contents and syllabi;
 - Course evaluation by students through Questionnaires.
3. *Assessment of students.* Only the following processes are in use:
- Performance evaluation/rating system;
 - Recurrent monitoring through intermediate attestations and recurrent exams;
 - Unified examination commissions for some subjects;
 - External review of graduation works (projects);
 - Participation of external experts in Final State Attestation Commissions (state exams, diploma defense).
4. *Quality assurance of teaching staff.* The following procedures are in use:
- Contract system of teaching staff hiring;
 - Competitive system of teaching staff selection based on qualification criteria set for specific academic ranks;
 - Internal HEI systems for faculty development (improvement);
 - Evaluation of teachers by students through questionnaires;
 - Evaluation of teaching skills and quality by colleagues through attendance of each other's classes.
5. *Learning resources and student support.* Adequacy and sufficiency of resources to the requirements of academic programs is measured through different procedures at the discretion of HEIs motivated by different reasons.
6. *Information systems.* The following forms of information are used by HEIs in the management of learning process:
- Regular collection and processing of information on students' recurrent and semester performance;

- Analysis of intermediate, examination-period and final results;
- Regular update and analysis of data on student body.

7. *Public information.* The following main sources of information are in use:

- Annual publication of lists of specialties (programs) offered, their admission quotas and conditions;
- Catalogues and other promotional/information materials published with varying periodicity;
- HEI periodicals (mainly in the form of a University magazine), information booklets;
- Different guides and Bulletins with course information;
- HEI websites.

6.2. Preventive Factors of the Process, Existing Problems and Needs

As main obstacles and problems in quality assurance the following might be noted:

- Armenia does not have previous experience in quality assurance and tested mechanisms of quality assessment in higher education;
- Non-developed culture of internal (institutional) quality assurance within HEIs, low level of awareness on quality assessment objectives and methods among the administrative, teaching staff and students;
- Extremely low participation of students and other stakeholders in internal and external quality assessment of programs and HEIs;
- Lack of international cooperation in quality assurance, isolation from European networks and associations of quality assurance;
- Lack of coordination in internal quality assessment mechanisms and inconsistency with procedures for external quality assurance;
- Measures for the implementation of Standards and Guidelines for Quality Assurance in the European Higher Education Area are not developed yet.

6.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Recommendations on Strategy

- ❖ The new quality assurance national system is to meet specific requirements of ENQA:
 - 1) Independence of structures responsible for quality assurance in selection of procedures and methods of assessment;
 - 2) Their adequacy to the profile and goals of HEIs to be assessed;
 - 3) Targeted use of internal and external quality assurance procedures;
 - 4) Involvement of main stakeholders;
 - 5) Publication of results.
- ❖ The system should anticipate:
 - 1) Defining responsibility and obligation levels for HEIs and other stakeholders;
 - 2) Assessment of programs and/or HEI, including internal self-assessment, external review, participation of stakeholders in the assessment process and publication of assessment results;
 - 3) Availability of clearly set quality assurance procedures and adequate criteria;
 - 4) International cooperation and participation in quality assurance international (European) networks.
- ❖ In terms of methodology competence based approach should prevail in quality assessment process with strong orientation towards practical and individual preparedness and firstly towards employability of graduates.
- ❖ The system should also have objectives of making the diplomas and qualifications compatible and easily readable, recognition of learning outcomes in EHEA, reliability and improved competitiveness.
- ❖ As for external quality assessment processes for HEIs and their study programs a shift should be made from passive approach of checking consistency of quality standards to an approach promoting quality improvement and advancement.

Respectively, it is necessary to clearly set external quality assessment goals that may include accountability of HEIs for quality, improved quality of education, securing of transparency, compatibility between national and international evaluation mechanisms, ranking of HEIs, etc.

- ❖ Institutional (inter-university) quality assurance systems must be consistent with the requirements of European Standards and Guidelines for internal quality assurance²³ (part I).
- ❖ External assessment procedures must be consonant with the requirements of European Standards and Guidelines for external quality assurance²⁴ (part II).
- ❖ National Quality Assurance Agency must meet the requirements of European Standards and Guidelines set for external quality assurance agencies²⁵ (part III).
- ❖ In the quality assurance process the assessment system must be guided by the existing international standards and criteria, particularly unified requirements²⁶ (*Dublin descriptors*) for Bachelor's and Master's degree programs developed in EHEA.
- ❖ Coming back to general strategy for quality assurance²⁷ it was already stated that main European guideline here is the use of simplified approaches for external quality assurance/assessment accompanied by well developed internal quality systems and culture. It should be again underlined that internal quality assurance procedures are to be firstly targeted at improvement of quality while external procedures – mostly at control and checking of consistency having in mind their adjustment to the goals and context within which HEIs are functioning.

b) Recommendations on Amendments and Additions to the Current Legislation

Further development of the referred Bologna activities (European cooperation in quality assurance) in Armenia, particularly, development of National Quality Assurance

²³ Standards and Guidelines for Quality Assurance in the European Higher Education Area. ENQA, Helsinki, 2005. 41p.

²⁴ Ibid

²⁵ Ibid

²⁶ Shared 'Dublin' descriptors for Short Cycle, First Cycle, Second Cycle and Third Cycle Awards. A report from a Joint Quality Initiative informal group. 18 October 2004. 5p.

²⁷ This project is also planning to develop a concept of national quality assurance system based on the principles presented here.

System requires serious legislative amendments that necessitate making of substantial amendments and modifications in the Laws on Education and Higher and Postgraduate Professional Education.

- 1) The list of main terms in the referred laws should be added with the terms of “quality management” and “quality culture” defining them according to the terminology accepted by the Bologna process²⁸ (see **Annex 1**). In this regard wording of terms “quality assurance”, “quality assessment”, “attestation” and “state accreditation” need to be revised and adjusted. To our view the Armenian equivalent of “*quality assurance*” – *դրական ապահովում* - is not good, as it is direct translation from the Russian “*обеспечение качества*”. We believe that options “*դրական երաշխավորում*” or “*դրական հավաստում*” better reflect the meaning of English term. By the way, in latest Russian sources, specifically in Russian translation of ENQA’s Standards the term “*гарантия качества*” is already in use.
- 2) Articles 42, 43 of the Law on Education and Article 22 of the Law on Higher and Postgraduate Professional Education need radical and consistent revision and modification. First of all this is related to the establishment of National Quality Assurance Agency instead of the Licensing and Accreditation Service, legislative corroboration of its status and authority, structure and main principles of national quality assessment and assurance system in consistency with ENQA standards as well as revision and clarification of provisions on accreditation.
- 3) In connection with the establishment of national quality assurance entity it is necessary to review and clarify the powers of the authorized entity (MES) in the area of quality assurance and accreditation (Article 21 of the Law on Higher and Postgraduate Professional Education).
- 4) The Law should stipulate Armenia’s mandatory participation in the European cooperation for quality assurance in higher education through the National Quality Assurance Agency to be established (external assessment of National Agency by ENQA, membership to the ENQA, registration in the European Register for Quality Assurance Agencies, etc.).

²⁸ Bologna Glossary (<http://www.dfes.gov.uk/bologna/index.cfm?fuseaction=content.view&CategoryID=1>)

7. Promotion of European Dimension in Higher Education

What we mean is development of joint study programs between different HEIs of EHEA in accordance with common curricular standards and quality requirements and granting of joint qualification. This is the starting phase of comprehensive curricular harmonization and convergence that will greatly contribute to validation of EHEA concept.

7.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ As a matter of fact there is no experience of inter-institutional cooperation and moreover, rooted traditions of developing and implementing joint study programs. The first such attempt was made by Postgraduate School of SEUA still in 1995 when in partnership with the American University of Armenia a so-called “superposed” Master’s degree program was established enabling some students with high performance in engineering be simultaneously involved also in MBA program with the American University of Armenia and get 2 qualifications in parallel. But this practice was interrupted shortly due to some objective and subjective reasons the most important of them being imperfection of respective mechanisms and legal obstacles related to student status.
- ❖ Another experiment that somehow relates to the idea of joint study programs was launched in 2004 in the frames of joint Master’s degree program for Management Information Systems implemented by the SEUA-YSU-YSEU inter-institutional consortium. The project was financed by the USAID – Armenia and the program was developed with direct participation of New-York University.
- ❖ In 2005 this initiative was continued with new efforts. 3 consortiums developed with the financial support of OSIAF – Armenia²⁹ started their activities in development and implementation of credit based joint study programs and mechanisms for credit transfer between cooperating HEIs. There were 3 university consortium groups:

²⁹ Open Society Institute Assistance Foundation – Armenia

SEUA-YSU³⁰-YSEU³¹, ASSU³²-SEUA and YSEU-YSU-FAY³³-UIR.³⁴ However it should be underlined that very limited number of students were involved in the referred pilot projects that couldn't create the critical mass that could have system-wide impact on the development of joint programs. Besides, transfer of credits (learning outcomes of courses) between members of the university consortium has been too complicated due to lacking legislative framework, respective recognition mechanisms and reliable quality assurance systems.

- ❖ In some HEIs also new international (mainly European or American) research centers were established with their staff being involved also in teaching process of those HEIs. Just recently such a structure - Center for European Rights and Integration – was established within YSU.
- ❖ The aforementioned examples are just precedents for further coordinated development of this Bologna action line. Evaluating the situation in general it should be stated that there are no legislative, methodical and resource preconditions necessary for the development of joint programs.

7.2. Preventive Factors of the Process, Existing Problems and Needs

Comparative analysis of European and local experiences in implementation of joint programs and provision of joint qualification degrees reveals the following preventive factors, problems and needs:

- ❖ Legislative framework required for authorization, licensing and accreditation of joint programs as well as attestation of such joint programs and provision of joint qualifications by local and/or international HEIs is lacking. Criteria and regulations for enrollment of students in joint study programs are also lacking.
- ❖ For international recognition of joint degrees and diplomas reliable internal and external quality assurance systems should be in place. For this purpose it is

³⁰ Yerevan State University

³¹ Yerevan State Economic University

³² Armenian-Russian (Slavonic) State University

³³ Financial Academy of Yerevan

³⁴ University of International Relations

necessary for the planned National Agency for Quality Assurance to cooperate with ENQA (as a candidate or full member) and be registered in the European register of quality assurance agencies.

- ❖ Initiation and implementation of joint programs is impossible without external expertise and, particularly, financial support necessary, particularly for ensuring bi-lateral academic mobility between cooperating HEIs being an important attribute of European joint programs. It should be stated that until recently Armenia has not participated in the *Erasmus-Mundus* program established specifically for this purpose. Armenian Agricultural Academy was the first institution in Armenia that started its participation in this program in 2007.
- ❖ Current charters of HEIs also hinder the implementation of joint programs containing strict restrictions for inter-HEI student transfers and preventing transfer of learning outcomes (credits).

7.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Recommendations on the Strategy for Further Development of the Process

- ❖ Armenia's strategy for European dimension in higher education cannot be viewed separately as it is an integrated component and important aspect of higher education internationalization and European integration general strategy.
- ❖ On the other hand, introduction and development of European dimension in Armenia's HE is basically connected with the development of other Bologna action lines – promoting attractiveness and competitiveness of higher education, academic mobility, mutual recognition of qualifications and learning outcomes, participation in European cooperation in quality assurance, etc. However, creation and development of joint programs and degrees lead to specific strategic issues which will be the focus of our attention.
- ❖ Situational analysis allows making the following recommendations for the development of joint programs- the main mechanism of European dimension:

- 1) Promote cooperation of Armenia's HEIs in the development of joint (integrated) programs disseminating and expanding the pilot project experience implemented with the sponsorship of OSIAF – Armenia (see p. 7.1);
- 2) Make more effective use of TACIS-TEMPUS program for the “Europeanization” of Armenia's HEI study programs ensuring participation of more than one Armenian HEIs in the development of joint programs with “European” content, organization and mobility features in the frames of respective consortiums;
- 3) Contribute to the involvement of Armenian HEIs in European Master's and European PhD programs and rollout respective experience, increase awareness of HEIs and students about these programs;
- 4) Develop current experience of English language teaching in Armenia's HEIs creating the required language base for the establishment of joint programs with the participation of Armenian HEIs, simultaneously strengthen teaching of foreign languages in Armenia's HEIs, particularly, in 2nd and 3rd cycles;
- 5) Secure additional funding for Armenian HEIs initiating projects aimed at development of joint programs using also respective international sources;
- 6) Establish favorable legal framework for licensing, implementation and accreditation of joint programs with the participation of Armenia's HEIs anticipating also possibility of conferring joint or double degrees by Armenian and foreign HEIs.

b) Recommendations on Amendments and Additions to the Current Legislation

Following the directions of Berlin Communiqué we would like to make the following recommendations in terms of legislative amendments and additions:

- 1) In the Laws on Education and Higher and Postgraduate Professional Education (Article 3) it is necessary to introduce and stipulate the terms “*joint programs*”, “*joint degree (qualification)*”;

- 2) It is suggested to specify possible cases and main requirements for the provision of joint degrees in the Law on Higher and Postgraduate Professional Education (see for example, Article 87 of similar 2002 Law of Austria on Higher Education) making respective references to UNESCO and CoE supplement³⁵ to Lisbon Convention;
- 3) Since the referred laws do not regulate joint program development, licensing, implementation and accreditation processes it is necessary to establish also relevant regulatory framework. Particularly, it is necessary to establish procedures for registration of students from Armenia's HEIs in other HEIs, recognition of learning outcomes, provision of joint degrees.

³⁵ The Committee of the Convention on the Recognition of Qualifications concerning Higher Education in the European Region: „Recommendations on the Recognition of Joint Degrees“, adopted on 9 June 2004.

8. Lifelong Learning

8.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ In Soviet times in Armenia there was an extensive network of institutes of retraining and professional development for different disciplinary areas as well as a network of continuing education courses within and outside HEIs to which a great importance was ascribed in the planned economy system in terms of efficient use of professional workforce. During the transition period, these structures lost gradually their importance as such and stopped functioning, being unable to adapt to changes and respond accordingly to the new requirements and challenges of market economy. Because of absence of appropriate state policy and financial support in this area have not been formed yet new equivalent institutional structures within or outside universities, while the further development of the area has been a stochastic process, expressed in short-term initiatives of separate organizations and individuals.
- ❖ An analysis of the situation entitled “Educational Policy and Lifelong Learning in Armenia”³⁶, has been implemented with support of Open Society Institute where the current directions of Lifelong learning and the participants are described. Since life-long learning in this report is considered basically in the context of Bologna process, our further analysis is confined in the frames of higher education system.

8.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ Armenia has not yet established the required strategic/legislative and institutional base for the full-fledged implementation of life-long learning initiatives, especially at the level of higher education. Even though the existing laws and the strategic documents are related to some aspects of life-long learning (extended education, vocational education, etc.), still they do not create necessary pre-requisites and guidelines for development of state policy in the sphere of life-long learning according to the principles specified in Prague and Berlin communiqué’s. Thus, the need for development of appropriate concepts and policies, legislative amendments and additions is obvious.

³⁶ Education Policy and Lifelong Learning in Armenia: Formulation of strategic benchmarks and continuous discussions. National Center for Policy Research and teaching” NGO: Yerevan 2005, page 134, (with support of OSIAFA).

- ❖ Furthermore, there are no common approaches to the terminology, curricular framework and criteria for quality and qualifications of life-long learning. The formation of the National Framework of Qualifications will enable to partially fill this gap. It is also necessary to apply the presently adopted European indicators and tools for higher education quality to life-long learning programs ensuring the recognition of the outcomes of previous studies, accessibility of higher education and acquisition of higher qualification by alternative ways of life-long learning and wide choice of diverse learning paths.
- ❖ At present, life-long learning does not have yet a clear social need and structured demand; it is not yet regarded as an effective tool for increasing employability and creation of “more and better quality jobs”. Moreover, the public understanding of the social aspect (social involvement) of life-long learning is not visible, which considerably hinders the involvement of universities and market orientation of their services offered in this sphere. Besides, the universities presently do not have reliable stakeholders and partners in their initiatives of life-long learning among state bodies, enterprises and NGOs.
- ❖ The situation is not satisfactory in relation of institutional offers for life-long learning either. Due to absence of external/state impact on the universities in Armenia have not yet realized that, as compared to traditional educational and research programs, creation and provision of life-long learning services is the bridge by which they could get directly connected with the educational needs of the society. The market of demanded services as well as the needs of main target groups in training and professional development are not studied; therefore, the universities are not ready to designing and organizing of such courses, while the Bologna process especially emphasizes the social mission of the universities.
- ❖ As of today, the RA legislation does not enable to get and/or raise higher education qualification through life-long learning. The present framework of qualifications does not give freedom for flexible alternative ways of higher education and accumulation of credits through non-traditional modes and their recognition.

8.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Recommendations on Lifelong Learning Strategy

❖ Armenia's commitment for participation in Bologna process, the issues of improving the country's professional workforce and raising the level of overall employment and social inclusion require formation and multi-faceted development of life-long learning system. The Berlin Communiqué of 2003 appeals for bringing the national educational policy in conformity with life-long learning objectives. Following the example of Bologna member countries in Europe, Armenia has to work out and ratify a unified national strategy for life-long learning in accordance with Bologna principles. We believe that the strategy should include the following elements:

- 1) Assessment and differentiation of demand for life-long learning according to target groups, system goals, objectives, structural components and clarification of appropriate terminology;
- 2) Separation and coordination between functions and authorities for organization of life-long learning at various levels/sectors of professional education; clarification of universities' mission, objectives and modes of participation in this area;
- 3) Diversification of possibilities and ways of life-long learning, facilitation of access, removing existing legislative and other barriers;
- 4) Establishment of interconnection between the offer and demand of life-long learning, formation of partnerships between various levels of decision making, as well as universities, state authorities, private enterprises and NGOs involved in the area;
- 5) Development and dissemination of pedagogical methods and experience, life-long learning programs and services based on information technologies, particularly e-learning;
- 6) Promotion of life-long learning culture, expansion of participation of various age and social groups;
- 7) Quality assessment, accreditation and licensing of the programs offered, as well as progress monitoring;

- 8) Joining the European cooperation in the area of life-long learning and to the formation of European area of life-long learning;
 - 9) Provision of appropriate funding and resources for the system, defining the role and ways of government support;
 - 10) Defining the outcomes and qualifications of life-long learning programs within the National Framework of Qualifications.
- ❖ In the context of Bologna process and the updated Lisbon strategy the role of the HEI is especially important as the main provider of life-long learning services. Our universities have to review their mission and development strategy and adopt the life-long learning component as a core activity in their operation. Such a reorganization will require some changes and preparatory activities, including:
- Revision of the existing variety of study programs, courses and services in relation to the needs and requirements of life-long learning, introduction of shortened programs, establishment of non-traditional ways of registration of external students in separate courses of regular programs, recognition of their learning outcomes and accumulated credits and step-by-step satisfaction of qualification requirements;
 - Studying the life-long learning market, identifying the potential target groups for services offered, the courses in demand in labor market and their levels, the needs of life-long learning in the context of regional development and creation of well-functioning means for advertising and marketing of above services;
 - Reestablishing the continuous and mandatory development (retraining) process for faculty and administrative staff, ensuring necessary methodological, staffing and technical support to development of various ways and technologies of life-long learning, particularly on-line education;
 - Establishing reliable mechanisms and procedures for quality assessment and assurance of life-long learning courses;
 - Providing for proper financial support for establishment of internal system of continuous education within HEIs;
 - Enhancing the inter-institutional collaboration in the area of life-long learning and setting up inter-institutional centers and networks in selected priority fields.

b) Recommendations on Amendments and Additions to the Current Legislation

The comparative analysis of European and RA education legislations shows that the introduction of life-long learning dimension in the Bologna process and comprehensive development of activities in this direction do not cause new and specific legislative issues, but rather demand re-orientation and further development of educational policy and strategy at European and national levels.

Both the framework Law on RA education and the Law on Higher and Postgraduate Professional Education provide certain provisions and possibilities for developing some components and typical ways of implementation of life-long learning, such as extended (supplementary) education, refraining, professional development, externship and distance learning modes of learning.

However, taking into account the last developments in Europe in the area of life-long learning as well as the Bologna requirements in this direction, some legislative amendments and additions are desirable, which, as we believe, will contribute to the progress of life-long learning in Armenia:

- 1) As a principle of state policy in the area of education, it is necessary to further the assurance of right for lifelong learning for citizens of Armenia at any age through creation of opportunities for professional education, raising of qualification and retraining. In this regard, appropriate amendments are needed to the laws on RA Education and Higher and Postgraduate Professional Education.
- 2) In the law on Education (Article 3) it is necessary to introduce the term “life-long learning” among the main terms (another term is also possible) and define it according to the European terminology of Bologna process. The definition should desirably indicate to which forms of educational activity the term refers. Particularly, we mean the forms already in use (supplementary/extended education, retraining, professional development, acquisition of a second specialty, externship, etc.).
- 3) It is necessary to develop the national framework of higher education qualifications taking into account the perspective of life-long learning. In particular, possibilities should be created for acquisition of qualifications at any

level through utilization of non-traditional ways of learning and without limiting the duration of studies.

The introduction of the institute of externship (extern student) into the RA higher education system should be accelerated, which will prompt the Ministry of Education and Sciences to urgently establish regulatory framework envisioned by the law. We believe that this new form of education will considerably contribute to the wide-scale introduction of life-long learning idea, especially at the level of higher education.

9. Higher Education Institutions and Students as Main Actors and Partners in the Bologna Process

9.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ The RA law on HPPE (Article 5) defines the outlines of self-governance of RA higher education institutions, authority (powers) and, according to the title of the article, the academic freedoms. Particularly, the higher education institutions are independent in deciding about their structure, organization of education process, ongoing attestation of students, formation of staff lists and selection of personnel, developing study programs according to the state educational standard, management of approved financial means and organization of paid external services.
- ❖ The law also envisions participation of students in the management of state universities with the number of student representatives being at least 25% of the total number of HEIs and departmental boards. The law also allows for involvement of students in student organizations, including student boards and student scientific associations.
- ❖ The awareness of Armenian students on the internal changes occurring at the universities has raised significantly due to Bologna reforms. This refers, first of all, to the credit system experimentally introduced during last years in SEUA and some other universities, about which sociological surveys conducted among students, have recorded a positive response. The other issue students are aware of is the three-cycle system of higher education, the second degree of which (Master's degree) has growing demand among students.

9.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ As already mentioned, raising the role and involvement of students and the universities in the Bologna process is the main pre-condition for success for the whole process. As it was anticipated, the “European” weaknesses and problems of Bologna process are occurring in Armenia with some delay. While assessing the present situation of the process, it is important to mention that activities are still focused at legislative changes, government (MES) decisions and at the level of

preparatory-coordinating actions and have not yet entered the phase of comprehensive implementation. Naturally, at present the universities and the students, with minor exceptions, cannot be considered as important actors of Bologna process in Armenia. Below are listed the main hindering factors and issues:

- ❖ First of all, the institutional autonomy should be mentioned. Despite the general progressive role of the Law on Higher and Postgraduate Professional Education, it considerably limits the institutional autonomy in a number of aspects - inter-institutional student mobility, joint programs and awarding of joint degrees, possibility of broadening professional scope, student admissions, etc., which, in its turn, restricts the involvement and roles of universities and students in Bologna process. The possibilities to switch from one specialization to another or from one HEI to another, recognition and transfer of previous learning outcomes as well as selection of alternative study courses are very limited. We think that the above-mentioned law needs comprehensive analysis and removing of the listed limitations. In the framework of law amendments, particularly Article 6 regulating the autonomy of universities and academic freedoms needs to be changed and completed, where the institutional autonomy and its main aspects (components) should be defined and missing formulations of academic freedoms added.
- ❖ Implementation of Bologna objectives and principles in the RA universities requires targeted financial support of the government and international organizations, the sizes, allocation schemes and terms of which should be decided for certain action lines based on the system-wide evaluation of additional expenses to be allocated for the reform implementation and identification of priorities.
- ❖ In the majority of cases the students and their organizations do not have a real understanding of the essence and functions of student self-governance since in the laws mentioned above there are no clear formulations on the principles of students self-governance within the framework of institutional autonomy.
- ❖ The law does not reinforce the participation of students in assessment of quality of educational programs. According to ENQA requirements, the procedures of student participation in internal quality assurance systems should be integral parts of these systems.

- ❖ Armenia does not have a national union of students, which would have been legally entitled to represent Armenian students in European students' organizations, etc.

9.3. Recommendations on the Further Development Strategy of the Process and its Legislative Support

a) Recommendations on the Further Development Strategy of the Process

- ❖ The Bologna reforms cannot be implemented without the full and active participation of the main stakeholders - universities, students and faculty since the expanding role of universities in building of EHEA assumes complete and timely implementation of Bologna principles within universities. This, in turn, requires revision, completion and essential development of the existent strategic document³⁷ on higher education reforms, taking into consideration the recommendations included in appropriate parts of this report. The complete and updated strategy for Bologna process should encompass formulation of strategic goals and objectives, description of actions, resources, progress assessment indicators for their implementation for all 10 action lines of Bologna process.
- ❖ It is recommended to ensure budgetary financial support for further course of Bologna reforms based on the developed strategy compensating the additional financial expenditures necessary for the implementation of Bologna led reforms in the universities. We think it is appropriate to use the available credit lines (The World Bank, etc.) for the solution of this hard issue.
- ❖ It is necessary to develop and strengthen the institutional structure of coordination and management of the Bologna Process on the system level. Predominantly, following the example of other Bologna countries, the creation of National Board of Higher Education is an urgent necessity, which, in addition to its core functions, could also coordinate the further development of Bologna process in the higher education system. The other necessary structure is the RA national union of students, which will coordinate the participation of students and their active role in the internal reforms of the universities within Bologna framework, and,

³⁷ Strategy for RA Higher Education Reforms, MoES, RA, Yerevan, page 51

concomitantly, will officially represent Armenia in European students' associations and students' international cooperation programs.

b) Recommendations on Amendments and Additions to the Legislation

The comparative analysis of RA and European legislation on the issue suggests the following observations and recommendations:

- 1) The Article 6 of the Law on Higher and Postgraduate Professional Education does not contain provisions on academic freedoms despite the fact that the title of the Article suggests the inclusion thereof. Even though the Article 28 of the Law on Education reads about some principles of academic freedoms, these are incomplete and need updating and further completion.
- 2) It is recommended to fully review and develop the Article 6 of HPPE Law, specifying the principles of the main elements in institutional autonomy – self-governance and academic freedoms in accordance with Bologna requirements and terminology.
- 3) In the Article 22 of HPPE Law it is necessary to stipulate the participation of students in the internal quality assessment process, which follows from ENQA requirements (Standard 1.1).
- 4) Recommendations for legislative changes on other aspects of broadening HEIs autonomy are listed in appropriate sections of the present report.

10. Promoting the Attractiveness of EHEA

10.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ The RA Ministry of Education and Science in collaboration with TEMPUS Yerevan Office and OSIAF - Armenia as well as other non-governmental organizations, has carried out considerable amount of work during the last years in RA higher education system in improving awareness on main principles of EHEA (Bologna Process) and raising the image and attractiveness of European higher education in Armenia, particularly after signing the Bergen Declaration in 2005 and becoming a Bologna member. Thus, a number of events and conferences have been organized with the support and participation of European leading experts and respective institutions and a number of informational and methodological materials have been published in Armenian. These events aimed at introducing to the public and main stakeholders in the area of higher education the advantages of European higher education as well as the progressive experience of leading higher education institutions in bringing their educational systems in line with EHEA principles. A special attention was paid to the introduction of credit system comparable to ECTS as a tool contributing to student mobility. The next direction of contributing to EHEA attractiveness was development of horizontal and vertical academic mobility of Armenian students in “Armenia-Europe” direction both through inter-HEI agreements and assistance of various European organizations (DAAD, Swedish Institute, etc.): Appropriate data are provided in the section 5.2 of the report.
- ❖ In the context of the given direction a special importance is attached to the bridging role of two higher education institutions with European roots functioning in Armenia, namely, European regional academy after R. Schumann and the French University as a tool for transmitting, testing and disseminating the principles of European higher education. We think that supportive conditions should be created to enable the above mentioned universities to acquire necessary attributes of European education and to properly fulfill their mission towards “Europeanization” of Armenian higher education system.
- ❖ During the last years a considerable progress has been made in recruiting foreign students from non-Bologna countries to study in Armenian universities, which is

largely due to organizing studies in English in some universities (SEUA, YSMU). As Armenia is a Bologna country, the above mentioned trend of the quantitative increase of students flow is another supportive factor in promoting to the external attractiveness of EHEA.

10.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ The Armenian HEIs do not have experience of targeted marketing of their educational offer, without which it is hard to achieve success in the strictly competitive international market of higher education. The inflow of foreign applicants formed as a rule in stochastic manner is extremely inhomogeneous by its quality that and brings about great difficulties in regards of achieving even lowest quality standards.
- ❖ The language factor is another major barrier to external attractiveness and competitiveness of Armenian higher education. The academic potential of teaching in foreign languages, particularly in English is quite limited in all disciplinary areas and almost in all HEIs. Thus, the need for a program and an inter-institutional specialized centre for intensive language training of faculty, which requires a definite state support, is obvious. Among other limiting factors are the fixed duration of study programs, the “rigid” curricula leaving no room for alternate learning paths, obstacles to student transfers between disciplines and HEIs, as well as to the transfer of credits and learning outcomes of previous studies.
- ❖ Another limiting factor for the inflow of foreign students is the insufficient social infrastructure (living conditions), especially the absence of dormitories meeting modern standards in the majority of universities. System-wide solution of this issue may play a significant role in raising the attractiveness and competitiveness of Armenian higher education in external market.
- ❖ So far, the main European tools supporting the international mobility of students such as ECTS, European Diploma Supplement, European CV have not been introduced in Armenia. Besides, the joint inter-university study programs, especially with participation of European universities are yet to be elaborated. Moreover, the student exchange quotes within the frames of inter-state agreements are limited and

there are no systematic state supported scholarship programs to promote international mobility of students. In addition, Armenia until recently had no participation in the Erasmus Mundus program– the main European initiative contributing to the EHEA attractiveness.

10.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Recommendations for Enhancing the Attractiveness and Competitiveness of Armenian Higher Education in Line with Bologna Process Strategy

It is obvious that in case of Armenia increasing the external attractiveness and competitiveness of higher education system is again one of the main driving forces for the reformations of HE system (Bologna process). Meanwhile, it implies harmonious improvement of teaching quality and employability of HEI graduates, which are believed to be the main prerequisites and instruments for raising the external attractiveness and competitiveness. On the other hand, since Armenia is a Bologna country, the implementation of Bologna principles in Armenia naturally contributes to raising the attractiveness of EHEA in Armenia, while EHEA higher attractiveness in Armenia will, in turn, improve the external competitiveness and image of higher education of Armenia, as a part of EHEA, and naturally promote the attractiveness of the latter for students from non-Bologna countries.

The situation analysis resulted in the following recommendations:

- 1) To develop within the framework of general strategy of European integration (Bologna process) of Armenian higher education a national strategy for external dimension of the system with the following main aims:
 - Raise the external attractiveness and competitiveness of Armenian higher education system within EHEA and beyond its borders,
 - As a Bologna member state, contribute to higher external attractiveness and competitiveness of EHEA and European higher education system in non-Bologna countries.

The main objectives of the national strategy for external dimension can be stated as:

- Creation of a unified information system (a portal or website) with description of external offer of Armenian higher education, academic potential of teaching and other resources, comparative advantages, criteria of admission, financial/social conditions for education. It will serve as a guide for the students and faculty of other countries being meanwhile an informational and advertising tool for improving the image and attractiveness of Armenian higher education.
- Improve the access to Armenian higher education for foreign students and faculty through broadening the teaching offer (spectrum of programs, specialties) in foreign languages, particularly in English, making easier the admission process, visa and working permit procedures and creating supportive conditions for transferability of previous learning outcomes (credits) and recognition of qualifications.
- Create a targeted program for intensive foreign language training of HEI faculty and inter-institutional specialized training centre(s). The program should mainstream the recruitment of faculty for disciplinary areas which are in demand by foreign applicants as well as their language training and final assessment to authorize teaching of respective courses in foreign languages.
- Develop and implement a targeted marketing policy for study programs and specialties (majors) of all 3 HE cycles offered by Armenian higher education in main donor countries of foreign students using also for this purpose the possibilities of RA Embassies to the highest possible extent. It is also recommended to work towards increasing the number of foreign students studying at the universities of Armenia in frames of inter-state agreements through both exchange quota and paid studies.
- Improve the living conditions for foreign students studying in Armenia, particularly build inter-HEI dormitories meeting modern technical standards.
- Contribute to raising of EHEA's attractiveness in Armenia by improving dissemination of information, transfer of educational technologies and progressive experience through mutual mobility, joint study programs and expansion of other forms of academic collaboration with European universities.

- Create necessary financial prerequisites for implementation of planned activities of promoting the external attractiveness and competitiveness of Armenian higher education system, such as state scholarships for mobility support, establishment of an inter-institutional Fund, improvement of learning infrastructure and social dimension via combining the internal public investments with external scholarships and study loan assistance (The World Bank, *TACIS-TEMPUS*, *Erasmus-Mundus*, etc).
- 2) The strategy for external dimension should be built on the basis of those principles that have already been or are being implemented within Bologna process. This especially refers to the European cooperation in the area of quality assurance, recognition issues, introduction of ECTS, European dimension and joint programs. It is expedient to select a HEI with best experience and achievements in the area of international cooperation especially in regard to Bologna Process. Such a university will coordinate the efforts of Armenian HEIs in improving external competitiveness and attractiveness in line with general national strategy for external dimension, which will allow to balance the competition between Armenian HEI's for foreign students and available funds with inter-institutional collaboration, thus contributing to higher external attractiveness and better international image of the whole system.
 - 3) The strategy should be realistic, measurable and be provided with sufficient resources to employ given the very limited time for its implementation (till 2010).

b) Recommendations on Amendments and Additions to the Current Legislation

Promotion of EHEA's external attractiveness and competitiveness, or, in other words, the development of external dimension of Bologna process does not cause serious legislative issues; it is rather a question of policy and strategy. Still, the development of national strategy for external dimension of higher education implies some legislative amendments.

- ❖ It is recommended to re-formulate Article 5.3 and 5.4 of the Law on Higher and Postgraduate Professional Education as follows:

“3) Contributing to the internationalization of Armenian higher education system and particularly to the integration in EHEA,

4) Support to raising the attractiveness and competitiveness of Armenian higher education on the international arena.”

- ❖ It is necessary to establish special regulations for licensing specialties and study programs taught in foreign languages for foreign citizens studying at Armenian HEIs and establish necessary criteria for assessing the language proficiency of faculty as well as requirements to the teaching literature and methodological materials in appropriate foreign languages.
- ❖ It is also recommended to make necessary amendments in corresponding Legislative Acts on issuing visas and work permits to foreign students during their studies and on portability of state scholarships and study grants from foreign countries to Armenia.

11. Doctoral Studies and the Synergy between the European Higher Education Area and the European Research Area

11.1. Situation in Armenia: Main Results and Progress Indicators

- ❖ In Armenia the postgraduate education, which is the equivalent of European Doctoral programs, has developed along with Soviet model. The main specific features of this model were the centralized system for admission to postgraduate programs and job placement of graduates; the obvious dominance of the research component (dissertation) of the program with respect to its educational component, limited to 3 general subjects of so called “candidate minimum”, as well as the complicated procedure for awarding a scientific degree. The cornerstone of the model is the pair of PhD student-Scientific supervisor and the success of the model was largely dependent upon the efficiency of that collaboration. Having been obviously oriented towards the creation of new scientific result, the traditional postgraduate model was unable to adequately react to the new demands of emerging market of research workforce in terms of required research skills and competencies of post graduate students.
- ❖ The first attempt of introduction of a structured study program in postgraduate cycle was done in the State Engineering University of Armenia. Since 1992, a two-year Researcher’s study program has been functioning there according to the Master Plan and Statutes of the University approved by the Government of RA. The program is integrated in the three-year program of postgraduate study and is finalized with awarding the qualification of Researcher. The “two-layer” (two-phase) structure of PhD program used in US and European (Spain, Sweden) higher education institutions was taken as the basis here, where the first two-year layer is comprised of core and elective courses and is terminated with granting an intermediate qualification (or certificate), while the second layer, the content of which is purely research goes through the whole doctoral program and is concluded with the defense of dissertation/thesis. The present two-layer model of the SEUA post graduate cycle (aspirantura) includes two separate processes of final assessment and awarding academic qualification of the Researcher in result of the assessment of the combined study and research program and awarding the degree of Candidate of Science (PhD)

based on the defense of dissertation in accordance with criteria and procedure established for the attestation of scientific personnel.

- ❖ The qualification of the researcher and the three-year duration of the program have been fixed in the RA Law on Education (1999) and in the Law on Higher and Postgraduate Professional Education (2002). However, the program has not been introduced in other HEIs of Armenia, which is explained by absence of a unified concept and normative base for this program. As already mentioned, since 2004 the Researcher's program in SEUA was reorganized with credit framework and modular structure. The program is composed of two inter-connected components – educational and research and corresponds to 120 ECTS credits divided equally between 2 components.

11.2. Preventive Factors of the Process, Existing Problems and Needs

- ❖ The existing legislation does not define correspondence between the European qualification of Doctor and its Armenian equivalent – scientific degree of candidate. Moreover, the requirements and procedures for awarding academic qualifications and scientific degrees are regulated by two different and insufficiently coordinated laws (Law on HPPE and law on scientific and scientific-technical activities), where the role and responsibility of the HEI (research organization) in the procedures of awarding a scientific degree is not clearly defined.
- ❖ Due to separation of attestation procedures for study programs and dissertation research it is not clear what is the relation between the two levels of qualifications in third cycle of higher education (aspirantura) - Researcher's and Candidate of science and their place in the national qualification framework to be developed, since the model European qualification framework does not envision a similar two-level structure for the third cycle. The Law on HPPE does not read that Researcher's qualification is a necessary condition for the Candidate of science degree, which enables to pretend directly for Candidate's degree by avoiding Researcher's study program in the third cycle of higher education. Unfortunately, there is no concreteness and consensus in these issues at the EHEA level either since there

have not been defined yet common principles for structuring doctoral programs and respective qualifications.

- ❖ The debates about transition from 2 scientific degree system (candidate of science, doctor of science) to a one degree system still continue without final conclusion. Several former USSR republics have already adopted a one degree system (Baltic States, Georgia). If the first scientific degree is recognized as equivalent to the European Doctor's degree the second scientific degree could be preserved in Armenia (even in the status of an honorary title) which does not contradict to the Bologna requirements.
- ❖ The regulations for licensing and accrediting postgraduate educational programs (third cycle of higher education according to Bologna terms) are not defined yet. Since the regulations for accreditation currently in force do not envision HEIs accreditation for separate study programs (program accreditation), some private higher education institutions, which have received institutional accreditation, also offer postgraduate degree programs, thus pursuing organization of degree-awarding specialized councils. Moreover, there are no quality assessment criteria or state professional standards for postgraduate education. We think that these issues should find their solution during the process of formation of the RA national framework of higher education qualifications and national quality assurance system.
- ❖ In regards of newly-established three-tier system of higher education and especially the harmonious development of its third cycle the low accessibility of postgraduate education and very limited inclusion of the graduates from previous cycle are major hindering factors, which require revision of the principles for admission planning and organization currently in force for postgraduate program (aspirantura). In view of planned quota for post graduate study only less that 5% of state HEI graduates (graduates having Master's or Diploma Specialist Degrees) have the possibility to be admitted to postgraduate programs. With the transition to three-cycle system it is necessary to establish rational proportions between admission quotas for Master's and postgraduate degree programs for HEIs and disciplinary areas, concomitantly removing the limitation on the admissions for tuition paid studies. Some revisions and amendments are needed for the existing system of admission to postgraduate program, which has to take into account the assessment outcomes (marks) of the

preceding Master's degree, that is especially important for introduction of a structured Researcher's (Doctoral) degree program.

- ❖ It is as well necessary to match the lists of specializations (disciplines) for master's and postgraduate (Researcher's) degree programs. It must be mentioned that the specialization title list for Master's degree has been established only recently by copying, in fact, the title list of specializations for bachelor's degree, to which it is hard to agree, while so far there is no unified nomenclature of specializations for Researcher's (Postgraduate) degree program (SEUA is guided by its own list). This also leads to the issue of reviewing the existing nomenclature for RA scientific professions to match it with current needs of research workforce market and the requirements for passing from Master's degree program to the Postgraduate one.
- ❖ Another issue of concern is the low employability of postgraduate students especially beyond the academic work, and in many cases also graduation without any destination. In Armenia, the market for research workforce has yet to emerge. Here the postgraduate program is not regarded as a study cycle preparing for further research career, and, as a rule, is not linked with specifics and needs of future jobs. The efficient experience of professional doctorate widely used in Europe has not been introduced in Armenia yet, which would connect the dissertation research with future research specialization and introduce innovative research projects in different disciplinary fields being based on "HEI – industry" research collaboration.
- ❖ To enable the postgraduate program graduates to be employable and competitive in a wide domain of academic and research jobs, they should acquire a number of both area specific and general working skills and competencies. This approach requires introduction of a certain structured study program at the postgraduate level, which will encompass a large spectrum of educational modules targeted to the formation of specific research as well as general transferable skills and competencies. These modules will be worked out based on the general and area specific qualification descriptors for the third cycle.
- ❖ According to Salzburg principles, for formation of a researcher (postgraduate student) it is especially important to ensure mobility, both on geographical/international and interdisciplinary/cross sectoral levels, which is an irreplaceable tool for acquiring wider research experience and additional research and general working skills. It is an

imperative to establish preconditions for stimulating international mobility of Armenian postgraduate students, especially within EHEA, using the possibilities of joint inter-doctoral programs between HEIs and that of European Doctorate.

- ❖ Restructuring of the third cycle of higher education according to European standards and assurance of appropriate quality of teaching cannot be achieved without additional financial investments, which should be mainly addressed towards improvement of research and educational infrastructure of postgraduate study, international mobility and financial encouragement of early researchers.

11.3. Recommendations on Further Development Strategy of the Process and its Legislative Support

a) Restructuring of Postgraduate cycle (aspirantura) into a structured research-study program

Here importance is attached to the following issues:

- ❖ *Program Structure:* The interconnectivity of the core research component (dissertation research) of the program and its educational component to be introduced, the proportion between their volumes and assessment principles should be main subjects for discussion. As already mentioned, the model in use today in SEUA envisions a “double-layer” structure for the program and two separate outcomes –assessment of study program with awarding of Researcher’s qualification and defense of dissertation with awarding of scientific (candidate of science) degree. Researcher’s qualification is a necessary condition for the scientific degree. The necessity for integration of 2 structural components of the program based on unified qualification descriptors is evident. The dissertation defense should as well value the main outcome of research education – the ability to carry out independent and efficient research, while, on the other hand, the Researcher’s study program itself is education for effective organization of research, especially dissertation research.

It is recommended to establish a state framework standard for the third cycle (post graduate) of higher education and, based on this, introduce standard requirements for the structure and content of the program according to the areas of specialization.

Organization of the program. There are two institutional models for program organization:

- 1) The structure (faculty, school, department) encompasses both Master's and Researcher's programs thus ensuring linkage between two cycles of research education and joint use of resources.
- 2) The structure includes only postgraduate studies (aspirantura).

The HEIs must choose appropriate organizational structure based on their specifics and institutional strategy. There is also a possibility for inter-HEI structures that would integrate the research resources of local and probably also partnering foreign HEIs in certain disciplinary area or interdisciplinary domain thus creating a possibility for high quality joint programs and research collaboration.

- ❖ *Awarding qualification, diversification of third cycle programs.* Research education and awarding appropriate qualifications are among the main aspects of the mission of a university. As we know, the European HEIs develop today optional models for third/doctoral cycle – professional doctorate, that is tailored to the needs of certain specialization, “industrial” doctorate, which is the outcome of the “HEI-industry” research collaboration and joint doctoral programs or European Doctorate that develop inter-HEI collaboration in EHEA in accordance with Lisbon objectives.
- ❖ While regarding the program diversification as a key direction for the development of third cycle, it is necessary to formulate a unified approach to the national qualification framework for this cycle. We mean differentiating the qualification (Researcher's, Candidate of science) awarded within this cycle using the European experience. In our opinion, in this case it is expedient to follow the common European recommendations taking into consideration the factor of employability of RA third cycle graduates in global European job market.
- ❖ *Restructuring the content of the program.* Formation of transferable working skills in the third cycle of higher education as well as improvement of the employability/competitiveness of graduates in line with global job market demands should become primary directions for the reform and Europeanization of postgraduate education (aspirantura).

Here equal importance is attached to both teaching necessary research skills (research methodology and technologies, research management, competencies of

analysis and problem solving, academic writing, knowledge of intellectual property right, science ethics, etc.), and formation of transferable personal/professional skills and competencies (communication skills, teamwork, resource management, leadership competencies, employability and career management). It becomes especially important the proportion between core and elective components of the program in “skills” education and the selection of appropriate modules and courses within them. The rational distribution of “skills” education content between Master’s and Researcher’s degree programs should become another target in reformations.

This issue is directly related to formation of national framework of qualifications, which will serve as basis for formation of third cycle programs by HEIs. It is necessary that the requirement for development of transferable working skills becomes a core element in internal quality assessment systems of HEIs:

- ❖ *Internationalization of the program:* In the context of Bologna process another target for reformations in postgraduate education is the multifaceted development of postgraduate students’ mobility as an integral part of research education and main tool for internationalization of the program. The main direction for development of international mobility, and therefore internationalization are elaboration of joint doctoral programs with European Universities and the expanded participation of Armenian postgraduate students in the European doctorate programs, which should also become a priority area for introduction of ECTS system.

b) Increasing number of postgraduate students, improving the planning and admission to postgraduate studies in line with demand of higher education, science and innovative economy in research workforce

- ❖ The demand for increased number of third cycle students comes from the requirements of Lisbon strategy³⁸ of EU economic development which have also found their reflection in the Bergen Communiqué: “... *We need to have an increased number of doctoral candidates who will start research career within the frames of EHEA*”. The Lisbon goals are also in tune with the adopted strategy for Armenia’s economic development where the knowledge-based economy has been declared a

³⁸ http://www.etuc.org/a/652?var_recherche=+%22Lisbon+Strategy%22

priority. Another urgent need is the renovation and reinforcement of academic staff in HEI's.

- ❖ It is recommended to gradually expand the budgetary investments in this area and to double at least till 2010 the number of students studying tuition free guided by the principle of differentiated allocation of state investment in line with the priorities of economic and scientific/technological development. This recommendation is in complete conformity with the already mentioned Salzburg principles (10-th principle) for development of European doctoral programs.
- ❖ The present practice of admission planning for postgraduate courses is also in need of review and improvement. Authorization for implementation of a third-cycle program and planning of admission quotas for respective HEIs and specializations should be carried out based on the results of quality assessment of Researcher's and preceding Master's degree programs in accordance with the ENQA standards for external quality assessment. Meanwhile, the admission for tuition free education should be used for attracting gifted young researchers into the high priority areas of science, technology and higher education, which implies to set up certain state priorities for admission planning for tuition free education. It is recommended to urgently develop and endorse the regulations for licensing and accrediting the postgraduate studies taking into account the ENQA standards for quality assurance. Meanwhile, for post graduate cycle it is necessary to proceed to the employment targeted admission planning for tuition free education, keeping in focus the renovation and rejuvenation of scientific and pedagogical potential of state HEIs and research organizations.

It is necessary to create supportive conditions for expanding tuition based full time and correspondence education admissions to postgraduate studies using opportunities of involving students in research projects or supporting them by education loans and scholarships. In this regard, the experience of the European professional/industrial doctorate is worth of studying and diffusion.

c) Recommendations for Amendments and Additions to the Current Legislation

Transition to the three-tier system of higher education and reorganization of postgraduate education as the third level of the three-tier system imply a number of legislative problems.

❖ *Ensuring compatibility between RA postgraduate qualifications and European Doctor's degree.*

It is possible to present three alternative solutions to the question:

- 1) The Researcher's qualification and the degree of the candidate of science are replaced by the unified academic degree of a Doctor, which is awarded based on the assessment of outcomes of third-cycle study program and defense of dissertation. This route of reform has been chosen by the Baltic republics, Georgia and other countries. Another option of this version is also possible, where the third cycle is completed by awarding the degree of a candidate, which is assumed as the equivalent to EHEA Doctor's degree. In this case the scientific degree of Doctor of Sciences could be preserved, but not included in the national framework of higher education qualifications.
- 2) The amended Law on Higher and Postgraduate Professional Education defines the equivalence between the scientific degree of the candidate and European Doctor's degree in conformity with the EHEA framework of higher education qualifications. For the third cycle, the Researcher's qualification and the degree of candidate of sciences are simultaneously preserved and a two-phase assessment process is established for the program, where the existence of post graduate/researcher's qualification becomes a necessary condition for awarding the degree of the candidate. Here the 2-level system of scientific degrees remains again unchanged.
- 3) Only the degree of candidate is preserved for the HE third cycle as the highest level in national framework of qualifications, while the Researcher's qualification is replaced by an appropriate certificate preserving the two-phase attestation process. Again the two scientific degrees are preserved.

Implementation of each of the above versions will require appropriate amendments to the RA laws on Education, Higher and Postgraduate Professional Education as well as the law on Science and Scientific activities. In our opinion, the choice of an acceptable version has to be done within development of national framework of higher education qualifications when the structure and titles of qualifications of all three degrees will be clarified and their correspondence to appropriate EHEA qualifications will be established.

- ❖ *Legislative stipulation of the requirements for the third cycle qualifications.* It is necessary to stipulate the main requirements to the third-cycle degree qualification (qualifications) in the HPPE Law:
 - Duration and workload of Program by ECTS credits – 3 years, 240 ECTS credits;
 - Core research component, assessed through defense of dissertation;
 - Core educational component - at least two years and equivalent to 120 ECTS credits;
 - Description of final outcomes, established qualification descriptors;
 - Type of program/qualification – academic or professional;
 - The principles for attestation of programs and awarding degrees.
- ❖ Correction and completion of terms and their definitions specific to the third cycle according to the amendments of law. Particularly, the terms “postgraduate education”, “postgraduate student/researcher”, “Researcher’s program”, “candidate of sciences” and “doctor of sciences” as well as the definitions thereof need revision and corrections.

General conclusions

I. From Bergen to London: Progress towards EHEA

Let us try to evaluate the progress of Bologna process in main features based on the analysis presented in this Report and the recently published Stocktaking Report³⁹ of Bologna process. The outcomes achieved for different action lines are grouped and evaluated below according to main components of Bologna process.

1. Structural Reform

1.1. Transition to three-cycle HE system

An essential progress has been registered in the implementation of three-tier higher education system both at national and institutional levels. In half of Bologna countries the majority of students study within two-tier system, and in the majority of countries (80%) there are no obstacles to the transfers (admission) from one cycle to another.

1.2. National frameworks of qualifications

All Bologna countries (with one exception) have started developing their national frameworks of higher education qualifications compatible with the overarching European framework of qualifications adopted in Bergen, while seven countries have fully introduced them to their educational systems.

1.3. Joint programs and degrees

Almost all countries report that their national legislations allow or do not prevent the higher education institutions to award joint degrees, even though the number of such programs or the students involved in them is not large.

³⁹ Bologna Process, Stocktaking Report 2007: Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007. 88 pages.

2. Bologna Tools for Mobility and Mutual Recognition

2.1. ECTS-Compatible Credit Systems

Today ECTS is used almost everywhere by both transfer and accumulation regimes. Even though many countries have started the practical implementation of ECTS, the relation of credits with the learning outcomes of study programs is reflected only in rare cases. On the other hand, only one third of countries has in place and uses clear procedures for recognition and transfer of learning outcomes (credits) of previous studies.

2.2. European Diploma Supplement

The progress is very prompt, and the majority of the countries have completed the comprehensive and full implementation of Diploma Supplement. In some countries it is not awarded automatically but is provided at the request of the student, while in 1/3 of countries DS is not available to students in all HEIs and for all study programs.

2.3. Mobility

Even though some progress has been registered, still the main factors imposing obstacles to mobility have been preserved related to recognition of qualifications and periods of studying abroad, insufficient financial incentives and transfer of scholarships.

2.4. Recognition

Thirty-eight Bologna countries have already signed the Lisbon Recognition Convention and there is a tangible progress in implementation of the Convention. However, the approaches of different countries and HEIs in relation to mutual recognition quite deviate from each other, which makes the process complicated.

3. Quality Assurance

The ENQA Standards and Guidelines of quality assurance adopted in Bergen have proved to be powerful drivers for changes in the area of quality assurance. All countries have started to implement them, while some of the countries have shown a considerable progress.

3.1. In 1/3 of countries the national systems for quality assurance are completely consistent with ENQA standards. The external quality assessment system has also advanced quite a lot even though many countries still do not have national agencies for quality assurance as well as procedures for external quality assessment.

3.2. The international cooperation in the area of quality assurance has not yet sufficiently developed; only 1/4 of countries have full participation. Here a key role is prescribed to the European Forum of Quality Assurance (E4 group) and the Register of higher education Quality Assurance Agencies established by the Forum. The registration should be voluntary, self sustainable, independent and transparent.

3.3. In 2/3 of countries the students participate at least in one level out of four levels of quality assessment/assurance process (National Bodies for Quality Assurance, external assessment of HEIs and study programs, consultancy related to external assessment, internal quality assessment).

4. Synergy of higher education and research

4.1. The doctoral programs are the main tool for synergy between EHEA and ERA. The growing attention to these programs and their prompt diversification are not yet paralleled with appropriate growth of doctoral students' number. Additionally, the general principles of structuring these programs within EHEA have not been defined and agreed upon yet.

4.2. According to the national reports of Bologna member states it is hard to have an adequate picture about the present state of relations between higher education and research and furthermore, to evaluate the impact of Bologna process. It is necessary to define more clear quantitative indicators for assessing the degree of synergy between EHEA and ERA.

5. Lifelong Learning

As the Bologna Process “Stocktaking” Report shows, strategic studies, some elements of flexible learning paths and alternate forms of Lifelong learning exist in all countries, but creation and implementation of Lifelong learning initiatives have not yet become a core component of mission and institutional development of European HEIs. Today, life-long learning is regarded as the main area for raising employability of graduates and development of social dimension of higher education.

6. EHEA in the global context

The Bologna reforms have already overstepped the EHEA boundaries; they have created essential external interest in other continents and triggered collaboration with other educational systems. This has largely contributed to enhancing the attractiveness and competitiveness of European higher education. In London⁴⁰, the Ministers ratified the “European Higher Education Area in the global context” strategy, underlining as main policy areas improving information on EHEA, further contribution to the competitiveness and attractiveness of the Area, development of partnership based international collaboration and improvement of mutual recognition processes.

7. General assessment of the situation

7.1. Assessing the outcomes of Bologna process for the two-year period (from Bergen to London), one can see a considerable progress in all ten action lines of the process, even though the indicators used during “stocktaking” process have been stricter than back in 2005⁴¹. The progress indicators are especially high in the areas of introduction of three-tier system, quality assurance and mutual recognition of qualifications.

⁴⁰ Towards the European Higher Education Area: responding to challenges in a globalized world. London Communiqué, 18 May 2007. 7 pages.

⁴¹ Bologna Process, Stocktaking Report 2007: Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007. 88 pages.

7.2. The forecast on achieving the main objectives of Bologna by 2010 is optimistic; however, there also are certain challenges and problems in some countries and in some directions related to completing the reform process on time, particularly:

- Development of national frameworks of qualifications and their full-fledged implementation;
- Sustainable European collaboration in the area of quality assurance.

II. Towards 2010: The Further Course and Future of the Bologna Process

The Stocktaking Report leads to the following general recommendations for the participating countries in view of the coming two years:

- 1) Link the further activities to be undertaken along main action lines of Bologna process based on:
 - Needs of the students – mutual recognition of qualifications and learning outcomes, quality assurance, flexible learning paths, accessibility of higher education;
 - Learning outcomes of programs.
- 2) The implementation of national frameworks of qualification based on learning outcomes should be completed by 2010, connecting this action line with those of quality assurance, credit system, life-long learning, flexible learning paths and social dimension.
- 3) Ensure progress for all action lines of Bologna process, keeping in mind 2010 as the end of the reforms.
- 4) Officially connect the Bologna process with ENIC/NARIC network.

Afterwards

2010 is the milestone declared long time ago, which should mark the end of Bologna process and the start of European Higher Education Area. It is obvious that since long this date is not merely connected with the official start of EHEA. It has served as guideline for Lisbon Strategy for European Union and its components – European Research Area and the Copenhagen process, which develop in accordance with Bologna Process. On the other hand, the nearer 2010 is, the clearer it becomes that the procedures having started under the general Bologna umbrella cannot stop rapidly or fully execute their agendas. These processes resulted in huge cultural changes, the significance of which has not yet been fully apprehended; therefore, more time is needed for them to integrate into the public perception. The European Higher Education Area, which was the target of Bologna process, will continue developing and reacting to new challenges, thus becoming the driving force for social transformations and new processes of innovation. The time will show what the names of the processes that will follow the Bologna will be.

It is very important to foretell today what will be the situation and potential of our higher education system when this historical benchmark nears its end. Obviously, clear and measurable indicators are needed for 2010, which must describe the system progress towards EHEA in all 10 action lines of Bologna process to serve as guidelines for formation of strategy for further reforms. This issue is not among the study topics of this Report and will require additional system analysis.