

## BOLOGNA PROCESS

**SALZBURG PRINCIPLES: STATE OF ARTS IN  
THE REPUBLIC OF ARMENIA**

**LILIT PIPOYAN,  
RUBEN TOPCHYAN**

*National Centre for Professional Education,  
Quality Assurance Foundation (ANQA), Armenia*

**KEYWORDS:** Doctoral education, doctoral candidates (PhD students), quality enhancement, research, Salzburg principles, supervision

**ABSTRACT:** The Republic of Armenia joined the Bologna Process in 2005 in Bergen (Bergen Communiqué). Following its ratification by the Republic of Armenia (RA) National Assembly in 2005 steps have been undertaken to actively implement the Bologna lines to integrate into European Higher Education Area. Although the Armenian universities have developed and are operating, to different extents, their internal QA systems, delivery of doctoral programmes along with the Salzburg Principles has been left unattended. This causes difficulties with the recognition of the 3rd level degrees at international level.

The following research has been conducted in the framework of Tempus “VERITAS” project. All the Armenian partner higher education institutions implemented fact-finding on 10 Salzburg principles in their home institutions. The results of the fact-findings were analysed by the National Centre for Professional Education Quality Assurance Foundation (ANQA) and Education Quality (EQ) representatives. Later on ANQA organized focus group discussions among the partner institutions to summarize the results, to discuss the major lines, to unify the general approaches and perspectives and to come up with the recommendations on the quality enhancement of the doctoral education in Armenian. In the following paper we present the results of the fact-finding process and recommendations on the alignment of the Armenian doctoral education to the Salzburg Principles. The proposed recommendations can serve as a basis for the development of the Armenian doctoral education in line with the Salzburg principles.

<http://dx.doi.org/10.15208/pieb.2015.15>

**PIEB, Vol.15 (4), PP.148-155**

**Source:** Pipoyan L., Topchyan R., 2015. "Salzburg principles: State of arts in the Republic of Armenia", *Perspectives of Innovations, Economics and Business*, Vol.15(4), pp.148-155, <http://dx.doi.org/10.15208/pieb.2015.15>

### Introduction

The Republic of Armenia joined the Bologna Process in 2005 in Bergen (Bergen Communiqué). Following its ratification by the Republic of Armenia (RA) National Assembly in 2005 steps have been undertaken to actively implement the Bologna

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\* This paper was presented to PICP Conference Proceedings "Internationalisation in Higher Education: Management of Higher Education and Research", 13.04.2015, Prague.

action lines to integrate into European Higher Education Area. Nevertheless, the delivery of doctoral programmes in line with the Salzburg Principles has been left unattended, hindering mobility of students, graduates. Thus, it was vital to undertake field research to identify the issues and to develop a unified approach. The research has been conducted by the National Centre for Professional Education Quality Assurance Foundation (ANQA) in the framework of Tempus “VERITAS” project. As an independent quality assurance agency, ANQA strives to enhance the quality of higher education and to act as a major driving force behind the development of a quality assurance culture across Armenia.

The first section of this paper reveals the major findings on the eleven Armenian HEIs’ (consortium partners) state of arts in comparison to the Salzburg principles, while in the second section the recommendations are made on the alignment of the Armenian doctoral education to the Salzburg principles. The findings in this paper are derived from the fact-finding analyses and focus group discussions. The fact-finding was carried out among eleven higher education institutions functioning in Armenia. The focus group discussions were conducted by a team consisting of a moderator and assistant moderator representing ANQA, the representatives of the Ministry of Education and Science of the RA, Supreme Certifying Commission of the RA as well as the representatives of Education Quality (NGO) and above-mentioned universities participated in the discussions.

### **Salzburg principles: State of arts in Armenia**

Fact-finding on the current situation in doctoral education in Armenia is a good springboard to identify the major issues in this field. The awareness of Armenian approaches towards Salzburg principles gives us a holistic view of the current situation, which in the future might be helpful in reconstructing doctoral education at Armenian HEIs and formulating models of PhD education that best fit the Armenian context and meet societal needs.

#### ***Salzburg Principle I***

The core component of doctoral training is the advancement of knowledge through original research. At the same time it is recognised that doctoral training must increasingly meet the needs of an employment market that is wider than academia (EUA, 2005).

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*Originality of research* - the results of the fact-finding process indicate that though the main requirement of all research papers is scientific novelty, there is lack of distinct mechanisms in the Armenian universities to determine whether theses comply with the requirements of novelty and original research.

*Applicability* - the results of the fact-finding process revealed that the absence of commercialization of research results, lack of financial means, weak link between universities and labour market and absence of opportunities for testing research results in the practice hinders the further development of doctoral education.

#### ***Salzburg Principle II***

Embedding in institutional strategies and policies: universities as institutions need to assume responsibility for ensuring that the doctoral programmes and research training they offer are designed to meet new challenges and include appropriate professional career development opportunities (EUA, 2005).

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*Development and review of legal basis* - the results of the fact-finding process demonstrate that the HEIs agree on the need to change and amend relevant national regulations, documentation and legislative frameworks as well as doctoral programmes.

*Career opportunities* - there is a lack of 1. updating students on new career opportunities, 2. having exchange with other universities, and 3. encouraging international cooperation.

### **Salzburg Principle III**

The importance of diversity: the rich diversity of doctoral programmes in Europe - including joint doctorates - is a strength which has to be underpinned by quality and sound practice (EUA, 2005).

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*Collaborative environment* - the results of the fact-finding process show that in order to ensure the collaborative environment in Armenia there is necessity to: 1. provide locations for the practical part of research, 2. support researchers' participation in scientific-educational programs in Europe, 3. cooperate with numerous foreign universities and be involved in relevant international projects, 4. conduct benchmarks between EU and Armenian universities 5. develop sufficient documentations for regulating multidisciplinary programmes, 6. develop joint research programs, 7. establish a culture of interdisciplinary research with more than one supervisor.

### **Salzburg Principle IV**

Doctoral candidates as early stage researchers: should be recognized as professionals - with commensurate rights - who make a key contribution to the creation of new knowledge (EUA, 2005).

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*Early stage researchers* - the fact-finding process revealed that most of the scientific institutions employ their PhD students as researchers at the beginning of their studies with commensurate rights and responsibilities thus giving them an opportunity to integrate into a research organization's activities. There is also a tendency to concentrate attention of doctoral candidates mainly on the real needs of economy, which will allow getting reimbursement from acting employers.

Relationship between teachers and researchers as between a skilful scientist and beginner-researcher is not yet prevalent.

*Engagement* - doctoral candidates in Armenia are not yet engaged in all levels of governance and participation in decision-making at the university.

*Rights* - in the fact-finding HEIs highlighted the importance of development of an agreement sample between doctoral candidates, supervisors and university, where the rights and responsibilities of doctoral candidates could be formulated.

### **Salzburg Principle V**

The crucial role of supervision and assessment: in respect of individual doctoral candidates, arrangements for supervision and assessment should be based on a transparent contractual framework of shared responsibilities between doctoral

candidates, supervisors and the institution (and where appropriate including other partners) (EUA, 2005).

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*Supervision* - the main responsibility of supervisors at Armenian HEIs are: giving instructions, assisting doctoral candidates to define the objectives and tasks of the thesis, directing and observing the process of work, making corrections, assessing the work, assuring that the dissertation is completed as scheduled, running validation of doctoral candidates on their thesis (each year).

Despite the fact that the responsibilities of supervisors are defined, the rights and responsibilities between doctoral candidates and supervisors must be clarified. Supervisors are not encouraged or punished when their research students present good or bad results; there are neither states nor interuniversity mechanisms for this.

*Professional development* - there are no set mechanisms to provide professional development to supervisors at the Armenian HEIs.

#### **Salzburg Principle VI**

Achieving critical mass: Doctoral programmes should seek to achieve critical mass and should draw on different types of innovative practice being introduced in universities across Europe, bearing in mind that different solutions may be appropriate to different contexts and in particular across larger and smaller European countries. These range from graduate schools in major universities to international, national and regional collaboration between universities (EUA, 2005).

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*Critical mass and research environment* - the availability of relevant critical mass was stated as a result of the fact-finding process implemented by the partner HEIs. However, the necessity to make critical mass stronger is essential especially by involving international actors. The importance of giving doctoral candidates an opportunity to work in different research environment including virtual research networks was emphasized by the partner universities.

#### **Salzburg Principle VII**

Duration: doctoral programmes should operate within appropriate time duration (three to four years full-time as a rule) (EUA, 2005).

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*Duration* - according to the RA legislation, duration of PhD studies varies from three to five years. Nevertheless, the effectiveness of the set duration has not been assessed. Most of the universities claim that because of the credit system introduction, the core time spent on research has been reduced, and, as a matter of fact, PhD students have to do their research during the last year of their study. Therefore, there is a growing demand to reduce required parallel activities of doctoral candidates to allocate time to focus on their research as well as to exclude administrative procedures (thesis assessment and defence) from the overall duration of the PhD program completion.

#### **Salzburg Principle VIII**

The promotion of innovative structures: to meet the challenge of interdisciplinary training and the development of transferable skills (EUA, 2005).

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*Transferable skills* - although the Armenian universities provide courses in transferable skills, HEIs sometimes overemphasise the role of these courses hindering research activities and leading doctoral candidates to hunt for credits.

*Interdisciplinarity* - interdisciplinary training does not exist in Armenia as such.

### **Salzburg Principle IX**

Increasing mobility: Doctoral programmes should seek to offer geographical as well as interdisciplinary and intersectoral mobility and international collaboration within an integrated framework of cooperation between universities and other partners (EUA, 2005).

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*Mobility* - according to the results of the fact-finding process many doctoral candidates apply for international funding/programs for international grants/conferences. Universities foster and assist young researchers to participate in international conferences as well as find research and travel grants for PhD students. HEIs cooperate with universities abroad, there are different contracts signed and in force, however not always the aims and objectives in contracts are realized. There is no sustainable collaboration with other research and scientific institutions. We can conclude that despite a wide range of opportunities to mobility there are still many obstacles limiting mobility of doctoral candidates one of which is the absence of accurate delivery of doctoral programmes in line with Salzburg Principles.

### **Salzburg Principle X**

Ensuring appropriate funding: the development of quality doctoral programmes and the successful completion by doctoral candidates requires appropriate and sustainable funding (EUA, 2005).

*Financing* - sustainable and appropriate financing of doctoral programs is a worldwide issue and Armenia is not an exception. The fact-finding process revealed that the biggest problem is that innovative research programs do not find public or private funding sources. There is also no allocation of science funding with separate line in the universities' budgets. HEIs mostly ensure appropriate funding by participating in a variety of grant programs, another source are fee-paying PhD students who compensate the lack of the funding.

*PhD student salary* - a very small amount of salary is allocated only for the full-time PhD students (in Armenia there are full-time, part-time PhD students as well as seekers for PhD degree).

### **Recommendations**

The following recommendations are the outcomes of the focus group discussions with the relevant stakeholders and are made for the alignment of the Armenian doctoral education to the Salzburg principles based on the results of the fact-finding process. The proposed recommendations can serve as a basis for the quality enhancement of the Armenian doctoral education in compliance with the Salzburg Principles.

### **Salzburg Principle I**

#### *Training by research:*

1. Increase direct involvement of doctoral candidates in scientific trainings.

2. Develop an intended learning outcome-based individual research plan for a doctoral candidate.

3. Develop a plan including components of multidisciplinary research.

*Originality of research:*

1. Increase the accountability of processes of the doctoral education (research topic approval process, monitoring the progress of doctoral candidates through progress reports etc.).

2. Foster doctoral candidates to have publications in peer reviewed scientific journals.

*Labour market:*

1. Advise the Government of the Republic of Armenia to set priority dimensions for innovative research.

2. Admission should be planned according to the labour market needs and priorities.

**Salzburg Principle II**

*Research supportive environment:*

1. HEIs should amend their strategies selecting several main directions of research thus:

- making students' career development opportunities more transparent,
- achieving critical mass necessary for research,
- complying with the needs of the labour market thus gaining a financial support from the market.

2. Develop an institutional policy for research clearly focused on research alignment to institution's strategic aims:

- ensure research topic alignment with the institution's strategic aims and overall trends (could be verified by a relevant body).

3. Monitor the scientific progress of the individual doctoral candidates by achieved scientific results and career tracking.

4. Develop an institutional capacity building policy (doctoral schools, research centres, networks etc.).

5. Review existing curricula, master's degree and doctoral programmes.

**Salzburg Principle III**

*Creating collaborative environment:*

1. Eliminate absolute deviations of doctoral programs between different institutions (e.g. by benchmarking) thus leaving room for enhanced cooperation.

*Quality assurance:*

1. Set quality assurance mechanisms for assessing doctoral programmes and enhancement of their effectiveness and efficiency.

2. The QA process must be present in all the phases of doctoral education. The responsibilities of each level should be clearly defined for each phase.

**Salzburg Principle IV**

*Early stage researchers:*

Increase involvement of doctoral candidates to research oriented activities.

*Rights:*

1. Clearly formulate formal rights and responsibilities of doctoral candidates (e.g. by tripartite agreement).
2. Develop doctoral program handbook with detail description of learning objectives and plans of achievement in line with policy of an institution.

*Engagement:*

1. Increase motivation of doctoral candidates to be engaged in institution's governance.

**Salzburg Principle V**

*Supervision:*

1. Formulate responsibilities and duties of supervisors by written agreement.
2. Set criteria for supervisor's qualification requirements (professional, research).

*Professional development:*

1. Set mechanisms for supervisors' professional development.
2. Set or describe a workload of a supervisor.
3. Develop a policy to increase the professional experience exchange among supervisors.
4. Establish a network of supervisors.

**Salzburg Principle VI**

*Achieving critical mass:*

1. New innovative structures of doctoral programmes need to be developed (doctoral/research schools, clusters etc).
2. Doctoral thesis and main results should be accessible and available for all the stakeholders.

*Research environment:*

1. Provide doctoral candidates an opportunity to work in different research environments by collaborating with research related institutions at regional, national and international level, as well as with governments and business sector.

**Salzburg Principle VII**

*Duration:*

1. Take into consideration the impact of various factors while setting the length of doctoral studies.
2. Adopt a flexible approach to the timeframe of doctoral programmes (providing midterm progress reports).
3. Allocate sufficient time for the thesis writing and organizational issues.
4. Give an opportunity for a supervisor and a doctoral candidate to develop an individual plan for the PhD student which should be clearly set forth in the policy.

**Salzburg Principle VIII**

*Transferable skills:*

1. Promote the development of research-oriented transferable skills starting from master's degree programs.

### *Interdisciplinarity:*

1. Develop open and flexible curricula to undertake research based on interdisciplinary approach.

### **Salzburg Principle IX**

#### *Mobility:*

1. Adopt mobility supportive approach (international, interdisciplinary, intersectoral).
2. Ensure sufficient financial resources for mobility.

### **Salzburg Principle X**

#### *Financing:*

1. Develop a research strategy/policy for finding additional sources of financing
2. State funding for the doctoral candidates should be increased:

Advise Government to:

- develop a policy for research investments setting strategic priorities and analysing the effectiveness of the research investments (research as a service to society),
  - evaluate the needs of researchers.
3. Provide doctoral candidates with decent salary.

As it was stated above, the major issue for the HEIs is the lack of appropriate financing; universities use it as a main reference point while deriving other sizeable problems.

### **Conclusion**

As the need to create a competitive research environment increases in the whole world, it is essential for each country not to delay this process. The major obstacle that universities encounter during that process is financial issue. Therefore, the universities should implement an effective approach to financial cycle.

The recommendations and proposals can be used by the Armenian HEIs for quality enhancement of doctoral education and research in Armenia. It should be noted that the recommendations can be more comprehensively adopted by the universities running PhD programmes in Social Sciences and the Humanities as the universities running doctoral programmes in Natural Sciences have relatively well-established traditions of doctoral education and research.

In the end, it is important to remember that the reforms could not be implemented without stakeholders' active engagement in a dynamic dialogue, which is an essential prerequisite to ensure the quality of doctoral education and to support the developments in the field.

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