



National Center For Professional  
Education Quality Assurance  
Foundation

**EXPERT PANEL REPORT  
ON PILOT INSTITUTIONAL ACCREDITATION OF  
ARMENIAN STATE ENGINEERING UNIVERSITY**

**Yerevan - 2013**

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## **BRIEF INFORMATION ON STATE ENGINEERING UNIVERSITY OF ARMENIA**

The State Engineering University of Armenia (SEUA) is a legal successor of the Yerevan Polytechnic Institute which was founded in 1933 having only 2 departments and 107 students.

Currently, SEUA has over 10 thousand students studying on 4 degree programs at 13 faculties including around 150 foreign students studying in the English and Russian languages. The Central Campus of the University is located in Yerevan and the Branches are in Gyumri, Vanadzor and Kapan. There are units, Faculties and Chairs operating within the Central Campus and the Branches.

The governance bodies of the University are the University Governance Council, the Academic Council, the Rector's office and the Student Council.

The number of the regular academic staff of the University exceeds 900 and most of them hold the Degrees of Candidate or Doctor of Science. With its developed research system and infrastructure the University is nationally recognized as a leading center of technical sciences. The University accomplishes 4 study programs of vocational, higher and post-graduate professional education granting the qualification degrees of junior engineer, bachelor, master and researcher. Besides the degree programs the University also offers extension courses and a network of continuing education structures (life-long learning courses). The specialization scope of the University includes all main areas of engineering and technologies represented by 44 Bachelor and 39 Master specialties.

Apart from the academic units the University has a number of support/auxiliary services, such as the Faculty Development Centre, the Career Center, the Computer Centre, Scientific Library with more than 1 million books, manuals and scientific journals, Printing House, as well as cultural, sport and other social facilities and summer recreation camps.

The University has a leading role in reforms of the higher education system of the Republic of Armenia. SEUA was the first HEI (higher education institution) in RA which introduced two and then three levels of higher and post graduate education and today it successfully implements the European Credit Transfer System (ECTS), in accordance with developments of the Bologna process. During the last decade the University has developed an extended network of international cooperation including many leading Universities and research centers of the world. The University is a member of the European University Association (EUA) and is involved in many European and other international educational and research projects.

## COMPOSITION OF EXPERT PANEL<sup>1</sup>

The external evaluation of SEUA's self-evaluation and implementation of quality assurance processes was carried out by the expert panel with the following members:

- Prof. Eduard Khazaryan, (chairman)
- Doctor David Woodhouse, United Arab Emirates, expert panel member
- Grigor Alaverdyan, associate professor, expert panel member
- Edvard Danoyan, associate professor, expert panel member
- Laura Simonyan, student, expert panel member

The works of the expert panel were coordinated by the director of National center for professional education quality assurance foundation (ANQA) Ruben Topchyan.

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<sup>1</sup> Appendix 1 CVs of expert panel members

## **PROCESS OF EXTERNAL REVIEW**

### **Preparatory Phase**

SEUA applied for pilot institutional accreditation by submitting to ANQA the application form, the copies of the license and respective appendices.

The ANQA Secretariat checked the application package against the ANQA requirements: the data presented in the application form, the appendices and the ANQA electronic questionnaire completed by the university. According to the decision on accepting the application request a tripartite agreement was signed between ANQA, the Centre for Education Projects (Ministry of Education and Science PIU) and SEUA. The timetable of activities was prepared and approved, respectively.

Within the deadline set in the schedule SEUA presented the Armenian and English variants of its self-evaluation report according to form set by ANQA and also the package of attached documents. The self-evaluation was carried out by a team formed according to the order of SEUA rector. The staff of the expert panel was agreed upon with the university and was confirmed by the director of ANQA. Having got the positive opinion of the accreditation process coordinator the secretariat provided the self-evaluation report to the expert panel for observation.

Having observed the self-evaluation and documents of the university the expert panel conducted the initial evaluation according to the format preparing the list of questions for different target groups and also list of additional documents needed for observation

### **Preliminary visit**

On the basis of raised questions and problems for consideration the process coordinator together with the expert panel formed the schedule of the site visit which was agreed upon with the institution during the primary visit of coordinator and expert panel chairman.<sup>2</sup>, Guided by the ANQA assessment manual open and close meetings with the target groups, review of documents and resource observation were included in the site-visit schedule.

### **Site-visit**

The expert panel site-visit was conducted from May 20 to 24, 2013. The works of the expert panel started with the meeting at ANQA the aim of which was to discuss and reconcile the assessment framework and the problems which need to be considered during the site visit. All the members of the expert panel were present at the meeting including the coordinator, translator and secretary-stenographer. The site visit initiated and ended with the orders of the rector. The students and teaching staff who were to come to the meeting with the experts were chosen randomly. All the meetings according to the schedule were carried out. During the site-visit the expert panel also observed the resources and reviewed documents in different departments.

Each day of the expert site-visit ended with the meeting during which the experts discussed the results of the main issues formed during the meetings. On the last day of the site-visit during the close meeting the experts summed up the core findings of the visit.

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<sup>2</sup> Appendix 2. The schedule of the expert site-visit for external evaluation

After visiting the central campus in Erevan the experts also visited its branches in Vanadzor, Gyumri and Kapan.

The assessment was conducted according to the criteria and standards for accreditation and ANQA procedures giving three-level assessment scale: unsatisfactory, partly satisfactory and satisfactory. That scale was used by the experts firstly to assess each standard and then the overall criteria.

### **Expert Panel Report**

In two weeks' time after the site-visit the experts presented their own reports. On the basis of that reports the expert panel chair and ANQA coordinator formed the draft report which was agreed upon with the other members of the expert panel. The part concerning the facts was sent to the University for making comments and objections. Taking into consideration the comments given by the university the accreditation report was formed including the judgments, assessment and recommendations. The final report was signed by the expert panel chair and the coordinator.

The chair of the expert panel and the coordinator declare that this report is made up based on the panel members' reports. The panel has analyzed the report and agrees with the judgments included in the report. The panel members confirm that the evaluation was conducted in accordance with the requirements of the principle of independence.

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Eduard Khazaryan, chair

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Ruben Topchyan, secretary to the panel

## CRITERION I.MISSION AND GOALS

**Criterion: The institution's mission and purpose are in accordance with the relevant reference levels and are consistent with the policies and practices that guide its operations.**

### FINDINGS

**1.1** The mission, goals and objectives of State Engineering university of Armenia are clearly defined in the current fourth strategic plan of the university (2011-2015).

SEUA has a long-term experience of elaborating a strategic plan since 1996. In the beginning of each strategic plan the main findings of the previous strategic plan are briefly mentioned. Particularly Strategic plan 2011-2015 comprises detailed analysis of the implementation of Strategic plan 2006-2010 according to the key performance indicators. SEUA's mission is in line with the Armenian National Qualification Framework (ANQF) as the university provide ANQF 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> level academic programs (high school, specialist, bachelor, master, researcher).

**1.2** The Strategic plan is elaborated according to the university procedures. It is mentioned that external and internal stakeholders are engaged in the elaboration process.

Faculty councils elaborate Strategic plans for their faculties according to the university Strategic plan and taking into consideration the needs and demands of labor market as well as the opinions of the stakeholders. The university has the policy of engaging the employers in the process of elaborating academic programs.

During the site –visit the expert panel observed the results of the surveys conducted among the employers on their satisfactory with the SEUA alumni. But during the meeting with the employers it turned out that the surveys are not conducted regularly.

**1.3** Implementation results of the SEUA mission and goals are assessed according to the indicators of the University's SP progress of appropriate goals which are presented by the short-term and long-term programmes. During their sessions, the University Governance Council and the Academic Council and the Rectorate (based on necessity) discuss the performance progress of the programs and make necessary adjustments and adopt appropriate decisions.

### CONSIDERATIONS

The goals and objectives of the university and their relevance to the ANQF are clearly defined in the SEUA mission. The mission also reflects the needs and demands of external and internal stakeholders. Yet it is worth mentioning that the university does not stress its research focus. During the site visit it turned out that the university in fact has a research basis and it gives much importance to becoming a research university but it is not mentioned in the mission. Starting from 1996 four strategic plans were elaborated and put into action: "SEUA on the Eve of the 21st Century" (1996-2000), "SEUA in the 21st Century" (2001-2005), within the framework of the TEMPUS-TACIS project "Environmentally Driven

Strategic Planning at SEUA” (2005-2006) and the fourth one in 2010. It has a positive effect as it is based on the scrupulous analysis of the implementation results of the previous Strategic plan and impacts of external and internal environmental factors. Yet the expert panel did not notice the issues which were not implemented during the previous years because of different reasons (imperfection of legislation, not sufficient funding, changed in social-economic life).

Faculty councils elaborate Strategic plans for their faculties according to the university Strategic plan and taking into consideration the needs and demands of labor market as well as the opinions of the stakeholders.

**Taking into consideration the above mentioned facts** the expert panel finds that SEUA meets the standards of criterion 1. But there are some comments. In general SEUA has a distinct structure yet the expert panel finds that the research focus is not mentioned in the mission and the engagement of external stakeholders in councils is limited.

## **CONCLUSION**

The correspondence of SEUA’s institutional capacities to criterion 1 is **satisfactory**.

## **RECOMMENDATIONS**

- To make SEUA’s mission and goals more ambitious tending to become a research university in the future.
- It is necessary to evaluate the satisfaction of employers and graduates with the academic programs, graduate skills and competences gained at the university and accordingly to make changes in the curriculum.

## **CRITERION II. GOVERNANCE AND ADMINISTRATION**

**Criterion 2: The institution’s system of governance ensures ethical decision-making and efficient provision of human, material and financial resources to effectively accomplish its mission, educational and other purposes.**

### **FINDINGS**

**2.1** The SEUA governance is carried out by the SEUA Council, Scientific Council and the Rector. The governance is built on self-government and autonomy in combination with collegial and unilateral governance principles. The governing systems of the SEUA branches located in Gyumri, Vanadzor and Kapan are based on similar principle: the Scientific Council as a collegial governing body, and the Director of the Branch as a unilateral governor. They act autonomously within their functions, such as the organization of internship, the granting presentation of scientific degree of associate professor. During the last year the “Mulberry” system of electronic documentation circulation and other electronic tools have been implemented in the SEUA central campus which have considerably improved the operative documental transition and the process control.



The decisions made on all the levels of the SEUA are carried out in accordance with Rector's orders. The suggestions made on the bottom of the governing level are discussed on bottom-up system (chair session, faculty council, rectorate, Scientific Council Board, Scientific Council), pursuing democratic attitude and ethical norms.

For the purpose to enlarge discussions the projects of crucial decisions (e.g. strategic plan, regulations etc.) are frequently posted on the SEUA website in advance to get additional suggestions, remarks and opinions. In the self-evaluation report the governing system of the SEUA and its branches are presented in details. Although the SEUA Scientific Council has a Standing Committee for coordination and structural changes, no concrete facts on effectiveness of structural changes made within the SEUA are given.

**2.2** The SEUA has corresponding procedures that assure the involvement of the teaching staff and students in governing bodies which allow them to participate in teachers and students related decision making processes. Both teachers and students are involved in Yerevan and Branch Faculty Scientific Councils. In regard to the SEUA Council, the representation of the teaching staff is very low; only 8 of 32 places within the Council is provided for the SEUA working staff, while the dominant part of the places are occupied by the administrative staff.

As the meetings showed, the teaching staff and students of the SEUA participate in the SEUA governing process, and the involvement is especially active in Branches. Here more attention is paid on the participation of teachers and students which mainly depends on their low number and consequently their voices are more likely to be heard. Particularly, in Kapan Branch the students mentioned several examples concerning their involvement in the university governing process due to the Student Council. The teachers are involved in the Faculty Council and they participate in decision making processes that refer to them. Although all the decisions made by the Scientific Council have been posted on the SEUA website in last three years, the majority of the stakeholders do not use that source of information.

**2.3** While fulfilling its mission and goals, the SEUA implements short-term /one-year/ and long-term /five-year/ planning. The long-term planning is carried out via the SEUA strategic plan. The Branches have their own strategic plans where the local peculiarities in accordance with areal labor market demands are taken into consideration. The Strategic plan is implemented in accordance with the university's mission and goals, which, being discussed and reviewed by the faculties, is confirmed by the SEUA Council. The procedure of discussions of annual reports, summaries of outputs and implementation of the action plan for the upcoming year is considered as a monitoring mechanism. The progress evaluation indicators are viewed as a mechanism implemented for the implementation and monitoring of the strategic plan, i.e. for the long-term planning

**2.4** The process of gathering and analyzing information has not been carried out before and it has mainly been put into action for the elaboration of the strategic plan. The SEUA administration staff understands the importance of the research of factors that influence the university as well as the validity of information, hence, they are planning to conduct systematic, annual surveys among alumni and employers, take into account the entrance and

financial issues and to use received data in decision making processes. During the site-visit the teaching staff and students complained of the SEUA decision on the change of assessment system which states that in some cases while making decisions the SEUA did not take into consideration the results of data collection and analysis.

**2.5** In the self-evaluation report it is mentioned that the SEUA procedure administration acts on the basis of the PDCA cycle. The planning is processed in faculty departments and it is confirmed by the scientific councils. Afterwards the efficiency of the actions is clarified via reports, the level of fulfillment of planned objectives, achievements and shortcomings are assessed, as well as further improvement plans are elaborated for the upcoming period. However, during the site-visit the meetings with the university staff proved that the mechanisms of the last two cycle phases are not clearly regulated.

**2.6** While implementing academic programmes the SEUA cooperates with employers and on the basis of the results received from them improves the programmes. The academic programmes undergo an external expertise as well. It is not regularly implemented in all professional directions and it depends on the attitude of the faculty head staff.

In the self-evaluation report it is mentioned that large scale of information has been collected and analyzed due to the surveys which were conducted among students, alumni and employers.

**2.7** The SEUA gives importance to the announcements containing qualitative and quantitative information on the quality of academic programmes and granted qualifications. For this purpose the university carries out the following actions: publication of annual, and self-evaluation and university reports, involvement of key performance indicators of the strategic plan on the SEUA website, publications of “Polytechnic” journal etc.

The external expertise considered to be the most important tool for the evaluation of the quality of academic programmes but its mandatory use, as it is mentioned in the self-evaluation report, is mostly formal.

In the SEUA there are mechanisms that assure the dissemination/publication of quantitative and qualitative valid and up-to-date information on academic programmes and granted qualifications. The mechanisms that assess those publications are in a process of elaboration in the university.

## **CONSIDERATIONS**

The current management system of the SEUA is aimed at the implementation of the university’s mission and goals and it assures a regulated decision making process. However, the SEUA department of education quality control and management together with its importance and authorities is not viewed a tool for the management. Currently it does not properly fit within the administrative and organizational scheme of the university. The role and place of this department is vital from the perspective of following ethic norms and effectively managing the university.

A large involvement of students in management/governance of the university is observed, however there are no indicators to evaluate the efficiency of their activities.

As a result of questionnaires among teaching staff and employers it was turned out that the vast participation of the teaching staff in the governing council is not assured which hinders the progress and efficiency of the SEUA activity.

There are short-term and long term planning in the SEUA and the annual reports are stated as a mechanism to monitor them. The mid-term planning is missing the existence of which would make the management system more effective.

The financial planning is carried out annually which means that the whole planning is not long-term, and mostly short-term actions are taken into account.

The expenses for science are not viewed as a source of incomes for the further incomes. The research of strategy is not viewed as a main source of income either, neither the tuition fees.

During the site-visit the panel could not find out which the mechanisms to evaluate information gathering, analysis and application are. The surveys were mentioned as an information gathering mechanism but they were not carried out systematically, hence this does not give a full opportunity to evaluate the effectiveness.

***Taking into consideration the above mentioned***, the expert panel finds that the Criterion 2 meets the demands but there are some remarks. The SEUA management system is aimed at the implementation of its mission and goals.

The strategic goals are quite functional, and the internal stakeholders (working staff and students) are involved in different governing bodies, however, as it has already been mentioned, there are some shortcomings in terms of communication with external stakeholders. There is a data collecting mechanism which, however, is not fully elaborated and applied.

## **CONCLUSION**

The correspondence of the SEUA institutional capacities with the Criterion 2 is **satisfactory**.

## **RECOMMENDATIONS**

- The role and place of the SEUA department of education quality control and management should be reviewed and considered in the administrative and organizational system.
- The involvement of the teaching staff and employers in the SEUA management should be expanded and the ways of participation should be diverse.
- The mechanisms of evaluation of information gathering, analysis and application on the SEUA processes should be clarified/précised. It should be stated which department will implement and control the use of those mechanisms.

## **CRITERION III. ACADEMIC PROGRAMS**

**Criterion 3: The programmes are in concord with the institution's mission, form part of institutional planning and resource allocation, are intellectually credible and promote mobility and internationalization.**

## **FINDINGS**

**3.1** SEUA academic programs are in line with the university mission and State academic standards. Since 2012 much importance was given to the detailed description of academic programs the aim of which was to review the programs and make them outcome based. Before that this approach was implemented only for a few programs.

The branches of SEUA prepare specialists according to the needs of the area. Two specialties, namely, "Energy-Efficient Technologies and Energy Management" and "Semiconductor Physics and Microelectronics" were opened by the employer's request. Eight new specialties were introduced at the master's degree programme.

**3.2** During the site-visit it turned out that many academic programs has changed their methods now using modern interactive methods. The meeting with the teaching staff does not make clear for the experts what policy was used for selecting teaching, learning and assessment methods.

It became clear during the site-visit that electronic lectures are available at the branches of the university which makes the teaching and learning processes easier.

The effectiveness of teaching and learning methods is assessed by the surveys conducted among the students.

**3.3** The rating system was invested at the university in 1998, and in 2012-2013 amendment of students' knowledge assessment rating system was carried out. During the meetings it was mentioned that not only the participation but also the activeness should be assessed.

Steps were taken to assure the academic honesty, particularly the investment of the appealing system which still needs to be improved.

During the meetings it turned out that the only controlling mechanism for plagiarism at the university is that the graduate papers and master thesis should not be repeated during 3 years' time.

**3.4** Since 2003-2006 SEUA undertook the transition phase to credit system for master, researcher and bachelor academic programs. The content of the bachelor's degree programmes implemented in specialties Electrical Engineering, Electrical Mechanics, and Electrical Technologies has been compared with the similar academic programmes abroad.

It should be mentioned that training of foreign students is realized in a number of specialties in SEUA. Foreign citizens obtain Bachelor's degree in the following specialties: Biomedical Engineering, Electronics and Microelectronics, Informatics and Computing Techniques, Communication and Signal Processing, Electrical Engineering, Electric Mechanics, and Electric Technologies.

The implementation of learning with credit system fosters the mobility of the students.

**3.5** The procedure of monitoring and evaluating the effectiveness of evaluation procedures of the academic programs is described in the SER. During the meeting with the staff it turned out that the results of surveys among the graduates and employers gives reason to make changes in the academic programs and their evaluation process. It was also discovered that some programs were amended according to the demand of the employers such as “Moving objects in means of communication” was elaborated with the demand of “Orange Armenia”. In 2007-2009 all the faculties and branches conducted self-evaluation. The evaluation of the quality of faculties was conducted by 23 key performance indicators and based on it the evaluation report was formed including plans for improvement. According to the SER the monitoring and evaluation procedures were carried out for only a few academic programs.

## **CONSIDERATIONS**

While elaborating new methods of teaching and learning for different courses the academic progress of the students and the results of their papers are taken into account. The investment of modern methods (interactive, problem-based education) is not enough. The plagiarism in the graduate papers and master thesis is not included in the frame of academic honesty. The expert panel gives much importance to the control of preventing plagiarism cases.

Expert panel finds that it's a positive step forward that the academic programs now undergo the review process to make them outcome based and to compare with similar programs in leading universities abroad.

***Taking into consideration the above mentioned facts*** the expert panel finds that SEUA meets the standards of criterion 3. But there are some comments. The academic programs are in line with the university mission and form a part of its planning, yet there are some problems concerning the usage of modern methods.

## **CONCLUSION**

The correspondence of SEUA's institutional capacities to criterion 3 is **satisfactory**.

## **RECOMMENDATIONS**

- SEUA should enhance the number of academic programs for foreign students which will foster the mobility of students and the internationalization of the academic process.
- To assure the allocation of 120 credits with 50:50 proportion according to academic and scientific parts.
- To make the academic programs more relevant to the university mission the following steps should be taken;
  - ✓ To provide effective tools for organizing correspondence study,
  - ✓ To elaborate and implement intrafaculty programs

## CRITERION IV. STUDENTS

**Criterion 4: The institution has student advising and support services which provide for productive and learning environment.**

### FINDINGS

**4.1** The whole process of students' admission is organized and implemented by the Assessment and Testing Center (AST) which acts upon the RA government. The SEUA is involved in this process by suggesting the list of professions, elaborating propositions on the involvement of new professions, collecting admission applications as well as disseminating SEUA PR information. There are a number of examples of mechanisms of attracting students to undertake their own initiatives (as the site-visits showed that the similar process exists in branches as well).

**4.2** The university regularly conducts surveys to find out the level of their satisfaction with the quality of education and teaching process in the SEUA. The students' involvement in the SEUA governing and scientific as well as in faculty councils fosters to put forward issues on their educational needs. The Student Council promotes in this process too.

**4.3** There is a curator institute within the SEUA which, as the meetings showed, acts quite efficiently. The Career Center provides recommendations too. The students stated that the days for recommendations are regularly fixed and it promotes their academic progress.

**4.4** The self-evaluation report shows that for the purpose to assist and guide students the staff involved in the curator issues shows an active participation. As the meetings with students showed, the students have the opportunity to apply to the administrative staff concerning troublesome issues, however, there is no any fixed time schedule.

**4.5** There is a Career Center in the SEUA which was established in 2001. In 2012 it was reopened with even larger functional frames. The opinions about the Center were positive both by students and employers who cooperate with the SEUA. Due to the efforts of the Center, a complete and up-to-date data base has been established which will greatly contribute to the alumni to get jobs.

**4.6** Although the SEUA gives importance to and promotes the students' participation in scientific research activities, however, their involvement is unsatisfactory. The planned policy by the RA Ministry of Education and Science hinders their participation.

**4.7** The Student Council is actually responsibly for the students' rights protection in the SEUA. The university mentioned in the self-evaluation report about its intention to form a committee which will deal with the protection and legitimacy of students' rights. It is intended that the committee will also deal with the coordination of procedures on students' appeals and in cooperation with the Student Council it will carry out the protection of students' rights.

**4.8** The policy on the evaluation of educational, recommendation and other supporting services and on the quality is stated in the 2011-2015 strategic plan which contains the issue on investment of education quality evaluation and assurance within the university which in its turn will be compatible with the ENQA standards.

The meetings showed that the evaluation of recommendation and other educational services is mostly conducted orally and in this sense there are no clearly formulated and final mechanisms.

## **CONSIDERATIONS**

The significant/incomparable increase of part time students at the account of full time students is troublesome. It is necessary the SEUA studies and puts forward the reasons of the mentioned issue and maybe it can review the admission standards of part time study system and pay special attention to mechanisms of quality of academic programmes. The latter is left out from the elaboration frames.

As the content of the surveys held among students show, they give an opportunity to assess the existing situation. During the site-visit it was turned out that a number of issues concerning the students' educational needs have not been diagnosed fully by the university. During the meetings with the expert panel the students expressed their viewpoints mentioning that the time schedule of mid-term and final exams is not always proper for getting prepared for the exams.

The students freely apply to the administrative staff although there is no clear and fixed time schedule.

***Taking into consideration the above mentioned facts*** the expert panel finds that the Criterion 4 meets the demands but has some remarks. The students' involvement in the SEUA management/governing processes and councils is coordinated well. The level of involvement of students in scientific research activities is not sufficient; mostly PhD students are involved, and bachelor and master students' participation is not sufficient.

## **CONCLUSION**

The correspondence of the SEUA institutional capacities with the Criterion 4 is **satisfactory**.

## **RECOMMENDATIONS**

- The course paper should be reflected in the teacher's annual workload which will undoubtedly increase curators' responsibility and the efficiency of their performance.
- It is necessary to establish/form a university official body which will undertake the responsibility to protect students' rights, e.g. university ombudsman institute.

## **CRITERION V. TEACHING AND SUPPORT STAFF**

**Criterion 5: The institution provides for a high quality faculty and staff to achieve the set goals for academic programmes and institution's mission.**

**FINDINGS**

**5.1** The policy of recruitment of SEUA's teaching staff is based on involvement of a sufficient number of qualified professors into implementation of academic programmes and courses and ensuring its continuity.

At SEUA, there is a regulation for selection of qualified teaching staff and clear-cut processes for its implementation. In many cases highly qualified and experienced lecturers are invited to give lectures. During the visit to Erevan campus and branches it turned out that there are chairs where the double jobbers are more than the main lecturers.

**5.2** At the University, the qualifying requirements are developed for the specialists who teach definite disciplines of the educational programme, for example, in order to teach at the master's and the researcher's degree programmes it is necessary to have a degree of a Doctor of Science or a Candidate of Science in the corresponding field.

The teaching staff's evaluation of the quality of performance is carried out within the competition-contractual framework, through employment contracts based on the indicators of fulfilment of the planned academic, scientific, pedagogical and public activities. Attention is also paid to the student's survey results.

**5.3** In order to ensure the teaching staff's qualification growth, to boost efficiency of teaching, research and educational activities, as well as to improve actions aimed to improve the University's activities, teaching staff is regularly evaluated at SEUA in accordance with the educational mission and objectives, 1) by the Head of Chair's class recordings, 2) the results of teacher's educational-scientific work, 3) results of surveys among students.

During the site-visit the teachers complained that they are not aware of the results of the students' surveys, only from survey to survey.

**5.4** Training procedures for the teaching staff are designed at SEUA; they are generally carried out with the assistance of the Teachers' Training Center and are planned in advance. In the SER the results of the trainings were described according to each faculty. During the site-visit the experts got assured that the university gives much importance to the trainings providing the center with modern equipment. The training of the teachers of the branches were carried out by the same center in Yerevan campus together with the teachers in Yerevan campus. During the site-visit to the branches it turned out that not all the lecturers were included in the trainings.

**5.5** The average age of the teaching staff is rather high, which is a sign that sufficient work was not conducted in the respect of recruiting young specialists. The number of doctors in the engineering field is very limited. It turned out that 12-13 places for PhD students were not enough for the university. In the table 5.3 of the SER the data of the teaching staff recruitment was presented. It also states the fact that university's policy of recruiting young specialists does not have the desirable progress.

**5.6** It is stated in the SER that for the enhancement of the teachers' performance effectiveness the teachers get promotion. During the meetings it turned out that the university does not prevent the professional development of the teachers yet the resources are not sufficient.



## CONSIDERATIONS

SEUA has defined clear demands for the qualifications of the teaching staff for each academic program yet the effectiveness of the mechanisms was not evaluated. Such procedures should be in the center of attention and should be reviewed regularly.

SEUA has a policy for evaluating the teaching staff. One of the means is the survey among students the results of which often are not presented to the teaching staff. So the teachers don't have the opportunity of seeing their shortcomings and take steps to improve them.

***Taking into consideration the above mentioned facts*** the expert panel finds that SEUA meets the standards of criterion 5. But there are some comments.

SEUA has defined clear demands for the qualifications of the teaching staff for each academic program yet the effectiveness of the mechanisms was not evaluated. Such procedures should be in the centre of attention and should be reviewed regularly.

## CONCLUSION

The correspondence of SEUA's institutional capacities to criterion 5 is **partly satisfactory**.

## RECOMMENDATIONS

- To make the mechanisms of the election of the teaching staff more available for external staff
- To differentiate the salary of teaching staff for assuring qualified education
- To make the results of the surveys among the students available for the teaching staff especially at Yerevan campus
- To make efforts to enhance the number of PhD places for the university.

## CRITERION VI. RESEARCH AND DEVELOPMENT

**Criterion 6: The institution promotes research objectives, projects and expected outcomes. There is a research ethos and culture, and mechanisms for the validating research outcomes**

## FINDINGS

**6.1** One of the most important goals of the University's development is a sustainable development of research capacity, improvement of research productivity and ensuring of innovative competitiveness. This analysis of this standard in the SER is very global and does not comprise the main directions for the university.

During the site visit it turned out that the limited funding prevents the implementation of a number of issues in the strategic plan.

**6.2** In the Strategic plan SEUA has mentioned the main directions of its long-term planning which can't be considered as action plans. Mid-term and short-term programs refer to the commercialization of research results, of carrying out researches with industrial enterprises. The chairs make researches according to their directions but there is no distinct policy on the choice of research fields. There is collaboration with the external and internal market yet the funding is not sufficient.

**6.3** The processes and financial sources used for making research are comprehensively described in this standard. The university cooperates with other universities and scientific research institutes which will foster the development of research field. Scientific seminars, conferences and other activities are organized which are also considered to be type of a policy to promote research. Yet the engagement of the teaching staff in such like activities is little.

At SEUA there are 17 research laboratories funded from the state budget, 12 grant research projects, economic-contractual research projects and a number of international grant projects. Despite all these the funding is not sufficient to enrich the laboratories with modern equipment. In this respect works carried out at the branches is not satisfactory.

**6.4** SEUA is interested in internationalization of research but there is no clear policy in this respect. Some steps are taken: the university funds some parts of business trips but this problem is solved in other way- teachers find sponsors or use their own means. The heads of research departments brought several examples of international cooperation. Yet the number of cooperation can't assure the engagement of more teachers in those activities.

The expert panel asked the heads of research departments about the department of external relations and international collaboration which has a separate unit which deals with grants and international collaboration. The heads of the research department mentioned that the activities of grants department relate only to the teaching and administrative staff but in the research framework research departments themselves sign contracts with the external colleagues.

The number of publications in international leading journals is limited.

**6.5** The analysis of this standard is not complete. The mechanisms used by SEUA for making the correlation between research and academic processes are not mentioned. It's stated in the SER that the curriculum of master and research academic programs comprises the results of university's research and special professional courses and seminars. But during the meetings SEUA staff could not bring enough examples on the existence mechanisms to correlate research and academic processes.

## **CONSIDERATIONS**

Instead of describing the clear policy on research this part of the SER mainly focuses on research publications: seminars, articles, journals, patents, programs. All these are positive points but they don't reveal any policy or procedure.

The link between research and academic processes is lacking at SEUA which reduces the effectiveness of the university's activity.

Appendix 6.11 presents the list of publications of SEUA staff in 2010-2012 in Armenian and international journals and also their participation in international conferences. The presented number of research works can't reflect the effectiveness of research works, the engagement of students in research activities. The absence of scientific research laboratories in the university branches is troublesome.

**Taking into consideration the above mentioned facts** the expert panel finds that research activities are limited because of the limited funding.

## **CONCLUSION**

The correspondence of SEUA's institutional capacities to criterion 6 is **partly satisfactory**.

## **RECOMMENDATIONS**

- To encourage the link between research and academic activities. Pay more attention to the engagement of students in research activities.
- Taking into consideration the characteristic features of the university to increase the number of economic-contract works.
- To promote scientific publications in international leading journals.

## **CRITERION VII. INFRASTRUCTURE AND RECOURSES**

**Criterion 7: The TLI has its own property and resources, which effectively support the implementation of its stated mission and objectives and create a learning environment.**

## **FINDINGS**

**7.1** SEUA has necessary academic environment for the implementation of its academic programs. Both the central campus and the branches have sport hall and stadiums. Yerevan campus has also a swimming pool. There are also conference halls with relevant equipment, medical facilities, food service outlets, and entertainment places for students, laboratories. The university library has electronic recourses. During the meeting the students complained that the textbooks are not Armenian. It turned out that the newly published books are not available at the branches.

**7.2** According to the SER average monthly salaries of the University's employees at the end of the five-year period was 62 per cent in Yerevan compared to 50 per cent planned in the Strategic Plan. In terms of the salaries' increase, the same picture is in the Branches.

In table 3 the annual allocation of finances is presented but there is no analysis whether that resources are enough to reach the aims set in the strategic plan.

**7.3** Having a financial policy in line with its mission the university defines annual proportions for university development, salaries and infrastructure. But from the SER and during the meetings it was made clear that all the expenses come from the financial capacities.

**7.4** According to the expert panel the beginning of the greatest engineering program is a positive progress which aims at creating engineering laboratories (Armenian National Engineering Laboratories (ANEL)) for 6 faculties of the university.

It's troublesome that some academic laboratories don't meet the modern standards. Particularly the equipment at the laboratory of physics are very old and there are even devices that don't work.

**7.5** Mulberry electronic paperwork management system was invested at SEUA in 2011-2012. The system gives the applicant an opportunity to follow his application process at any time and get information to whom the application was sent.

**7.6** During the meetings the students stated that medical examinations are carried out regularly. At SEUA the health care services are conducted by the medical centers which are allocated in the 2<sup>nd</sup>, 7<sup>th</sup> and 21<sup>st</sup> buildings. Such services are conducted in all three branches. Sanitary and hygiene conditions are unsatisfactory in all the buildings of the university. As a shortcoming it should be mentioned that the university buildings are not available for the students with special needs.

**7.7** Surveys on the effectiveness and usage of resources are conducted regularly among the students. Such surveys have never been conducted among the teaching staff but for reviewing and monitoring academic programs such surveys are also planned.

## **CONSIDERATIONS**

There is a lack of academic and support surfaces especially in Erevan and Gyumri. It would be step forward to create on-line educational laboratories both in Yerevan and in branches. It is worth mentioning that SEUA has a wide electronic library and students are pleased with it. The problem is the lack of Armenian literature.

Mulberry system provides précised process of documentation and in this respect SEUA has a serious progress.

**Taking into account the above mentioned facts** the expert panel states that with the limited financial resources the university managed to provide the students with necessary resources. But the university should regularly evaluate the effectiveness of faculties.

## **CONCLUSION**

The correspondence of SEUA's institutional capacities to criterion 7 is **partly satisfactory**.

## **RECOMMENDATIONS**

- To find means of enriching the laboratory of physics with modern equipment
- To create conditions for the students with special needs.

## CRITERION VIII. SOCIAL RESPONSIBILITY

**Criterion 8: The institution is accountable to the government, employers and society at large for the education it offers and the resources it uses to meet these objectives.**

### FINDINGS

**8.1** For its activity SEUA is accountable to the society and to RA government and has clear mechanisms for the accountability. Recently the reports of the university units have become more practical and comprehensive as quantitative criteria were developed for each component which gives the opportunity of comparing the results of different faculties.

**8.2** SEUA gives much importance to the transparency of procedures and it is also included in the strategic plan. For the publication of its procedures the university uses different means: "Polytecnic" magazine, mess media, web sites, social networks. The number of mess media references about SEUA was mentioned in the SER and it was presented as a PR effectiveness. The demands of this criterion are not met in the branches especially in regard to the dissemination of information through Internet.

**8.3** The mechanisms of feedback are for example Facebook profiles of Yerevan and Gyumri branches. And besides getting the information about SEUA's activities the viewer can ask a question. At SEUA's web-site there is also a feedback mechanism where the visitors can leave their comments.

### CONSIDERATIONS

The transparency of SEUSA's procedures and attainability to the society is assured only in Yerevan campus. The branches need to improve the mechanisms of disseminating information. There are quantitative mechanisms for feedback analysis but the qualitative analysis mechanisms are not introduced yet.

**Taking into consideration the above mentioned facts** the expert panel finds that the university procedures in regard to social responsibility are generally transparent, for example the results are published in the web-site and other media. The effectiveness of these processes need to be examined.

### CONCLUSION

The correspondence of SEUA's institutional capacities to criterion 8 is **satisfactory**.

### RECOMMENDATIONS

- To develop the media system especially in the branches especially when all the branches have free Wi-Fi
- To assess the effectiveness of the report system
- To develop policy on assuring transparency

## CRITERION IX. EXTERNAL RELATIONS AND INTERNATIONALIZATION

**Criterion 9:** *The institution promotes experience exchange and enhancement through its sound external relations practices, thus promoting internationalization of the institution.*

### FINDINGS

**9.1** Though data on international collaboration and exchanges is provided in the SER there are no concrete examples of procedures which will prove SEUA's policy on promoting external relations. The analysis of the effectiveness of SEUA's policy and procedures concerning internationalization is not available. The branches don't have departments for the development of international collaboration. During the meetings it turned out that the teaching staff and students don't have enough knowledge of a foreign language to promote international collaboration.

**9.2** SEUA has external relations and international collaboration department which deals with the implementation of internationalization, exchange of experience and assurance of external relations. The goal of the above mentioned department is to collaborate with different foreign institutions and organizations, to foster the mobility of teaching staff and students and to get grants in this respect. The department has two units: 1) international collaboration unit, 2) grants and external relations unit.

The procedure on the report about the business trip results has just recently been regulated.

**9.3** SEUA effectively collaborates with local and international institutions and organizations. Several examples of such collaborations are mentioned in the SER. The number of foreign active colleagues of the university exceeds 120.

**9.4** The SER lacks in the analysis on the knowledge of a foreign language among the staff. Trainings and other activities are organized in regard to enhance the level of knowing a foreign language. But the effectiveness of such trainings and other activities is not analyzed. The standard required for the recent 3 years to present the number and percent of the teaching and administrative staff knowing a foreign language. But this is not available in the SER.

### CONSIDERATIONS

The lack of foreign relations departments in the branches prevents them from having the opportunity of making their own collaboration with international institutions.

The low level of knowing a foreign language does not allow the teaching staff and some part of students to be engaged international collaborations.

The activities of SEUA external relations and international collaboration department are regulated.

The level of knowing a foreign language is not satisfactory among both the teaching staff and the students and the university does not yet taken up any steps to solve this problem.

**Taking into consideration the above mentioned facts** the expert panel appreciates the obvious tend of the university towards internationalization. It has an international

department which takes up a number of steps to develop external relations. Yet the low level of knowing a foreign language among the teaching staff is a serious problem in this respect.

## **CONCLUSION**

The correspondence of SEUA's institutional capacities to criterion 9 is **satisfactory**.

## **RECOMMENDATIONS**

- To deepen and develop effective ways of teaching a foreign language using modern technologies which will promote increase in the number of foreign students and the mobility of teaching staff and students.

## **CRITERION X. INTERNAL QUALITY ASSURANCE**

**Criterion 10: The institution has a set infrastructure for internal quality assurance, which promotes establishment of a quality culture and continual development of the institution.**

### **FINDINGS**

**10.1** Unit for quality assurance- educational quality control and management department has been operating at SEUA since 2006. 23 key performance indicators have been developed and in 2008 the self-analysis of faculties and branches was carried out. In 2009 the report on it was formed. Now educational quality control and management department is included in the educational reforms and development department which in its turn is under the subdivision of the vice rector of international collaboration and development. The quality assurance activities related mainly to the development of academic programs and the effectiveness of other fields of the university was not paid attention to.

There are enough facts in the SER showing that great work has been recently done in regard to the development of quality assurance policy and procedures.

**10.2** In 2011 educational reforms and development department was formed in the university which includes educational quality control and management department and Division of Strategic planning and development programmes introduction. The main aim of restructuring was to separate quality assurance from education organization processes.

Educational quality control and management department is responsible for conducting surveys, gathering relevant information on the need of reviewing academic programs, organizing trainings and other activities concerning quality assurance. The division of Strategic planning and development programmes introduction is responsible for strategic planning, it organizes the long term planning, then monitoring and reviewing.

The name of the division can just be changed into Strategic planning division.

There is also Quality assurance committee which examines reports and programs on quality assurance and presents it to the rector and scientific council.

**10.3** Both from the SER and the site-visit it turned out that internal stakeholders (students and teaching staff) and external stakeholders (graduates and employers) are engaged in the quality assurance processes. Students and graduates take part in the evaluation of courses. Employers are members of final assessment committee. Students are also members of quality assurance councils and self-evaluation group.

**10.4** The works done by SEUA QA division are presented in the SER. Having the united policy on education quality assurance as a basis in 2011-2015 strategic plan SEUA has taken into consideration the accreditation standards and criteria demands set by ANQA. Such strategic goals and objectives are formed in the level of faculties and branches as well. And their implementation is in line with ANQA criteria for accreditation.

**10.5** In Yerevan campus the teaching staff is not aware of the results of surveys among students if they don't take part in the competition. This can't lead to the improvement of the programs. But in branches the teaching staff was well aware of the results of the surveys. In some cases the results should be presented in details for the teacher to understand his or her weak points and ways of improving them.

The transparency and attainability of the procedures are assured through portals, university web-site, mass media and other means.

Taking into account the wide spread use of the social networks in 2012 SEUA PR department created a Facebook profile. This was SEUA provides information to its external and internal stakeholders.

## **CONSIDERATIONS**

Many procedures on quality assurance are developed but they are not clearly regulated and are not successive. It became clear during the meetings. The sequencing of the quality assurance processes should be logical.

Quality assurance system is not complete and generally it is directed only to the improvement of academic programs. Other activities of the university are not analyzed yet. Within its bound SEUA provides human and financial resources for the implementation of quality assurance processes at the university.

The heads of the quality assurance committees in the faculties are the deans. This gives us a reason to think that the formation of quality culture will be consistent. Students are also included in these committees which is a positive point.

Mainly SEUA provides information about the quality of its procedures to external and internal stakeholders.

***Taking into account the above mentioned facts*** the expert panel assesses criterion 10 as positive with a few comments. The self-evaluation report was rather self-critical. It's obvious that quality culture is not completely created in the university and PDCA cycle is not closed yet the expert panel finds appreciates the recent achievements of the university and the desire to improve current activities.

## **CONCLUSION**



The correspondence of SEUA's institutional capacities to criterion 10 is **satisfactory**.

### **RECOMMENDATIONS**

- To involve relevant unit in the quality assurance processes that will carry out internal audit of all the university units.

## APPENDICES

### APPENDIX 1. CVS OF EXPERT PANEL MEMBERS

**Prof. Eduard Khazaryan** – member of RA pedagogical academy (1997), member of Russian science academy (2003):

Studied at Moskow Lomonosov university the faculty of physics (1965), in 1969 got the PhD in the same faculty.

Since 2002 he is the director of the institute of Mathematics and higher technologies in Armenian-Russian Slavonic university.

1999 -2001 he was the minister of Education of Science, RA

In 2001 was the head of “2001-2005 Education development project”.

**Dr. David Woodhouse-** The first part of David Woodhouse’s career was principally as a university academic. He has taught computer science and mathematics at all levels and in several different countries. While teaching at the University of East Africa in Tanzania, he played a leading role in mathematics extension work in schools. He then worked for a short time at the Universidad de Navarra in Pamplona, before taking up a post in Australia. In Australia, he founded the Department of Computer Science at La Trobe University and was foundation Dean of its School of Mathematical and Information Sciences. He also helped to develop computer science in schools, designing courses, writing textbooks and training teachers. His experience in the field of external quality assurance began with service on, and chairing of, review committees for computing and computer education courses throughout Australia. In 1990 he moved professionally into the field of quality assurance. From 1990 to 1994 he was Deputy Director of the Hong Kong Council for Academic Accreditation, with responsibility for the quality of degree courses in Hong Kong. From 1994 to 2001 he was founding Director of the New Zealand Universities Academic Audit Unit, which is responsible for auditing the quality assurance and control procedures of New Zealand’s universities. In 2001 he was appointed founding Executive Director of the Australian Universities Quality Agency, which is responsible for auditing the Australian universities, other higher education institutions and accrediting agencies. In all three positions, he has been responsible for advising on policies, establishing procedures, training auditors, and working with governments, tertiary institutions and other organisations. In 2011, he joined the UAE’s Commission for Academic Accreditation as Commissioner for Development. He is now leading a project to create a national Center for Higher education Data and Statistics in the UAE. In 1991, he was a founder of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE). He was Secretary of INQAAHE and Editor of its newsletter for most of the period from 1991 to 1997. He was then elected and re-elected as President for two successive two-year terms. He became President again in 2007 and was re-elected in 2009. In 2003, he helped to establish the Asia-Pacific Quality Network, and was the Secretary for three years.

David Woodhouse has published a large number of papers on computing, education, and quality assurance, and been invited to assist with the development of quality assurance systems and the training of quality reviewers in many countries throughout the world. He is an Executive Editor of the British journal 'Quality in Higher Education', a member of the Editorial Board of the Chinese

journal 'Higher Education Development and Evaluation', and has been an adviser to agencies and institutions in various countries.

**Grigor Alaverdyan, associate professor-** studied at YSU in the faculty of physics and got the qualification of physic (1966-1971). 1974-1977 was a postgraduate student in Dubna, Russia.

He is a member of the faculty committee of Radiophysics.

Since 2012 is the head of the Wave process and physics chair at YSU.

Mr. Alaverdyan coordinated the works of methodological committee in master programs.

Coordinated the investment of academic programs of bachelor level in physics.

**Edvard Danoyan, associate professor-** 1974-1979 studied at YSU in the faculty of applied mathematics. 1987-1991 studied as a postgraduate at National Science Academy of Armenia. In 2001 got the title of associate professor.

Since 2003 is the deputy dean of YSU faculty of Informatics and applied mathematics. He is an author of many publications.

**Laura Simonyan-** Master student at YSU. Has taken part in trainings within ARQATA project about internal and external quality assurance.

## APPENDIX 2. SHCEDULE OF SITE VISIT

20.05.2013

		Launch	End	Duration
1.	<b>Expert panel meeting at ANQA</b>	<b>9:30</b>	<b>10:30</b>	<b>60 minutes</b>
2.	<b>Meeting with the Rector</b>	<b>11:00</b>	<b>11:30</b>	<b>30 minutes</b>
3.	<b>Meeting with the self-assessment working group</b>	<b>11:40</b>	<b>13:10</b>	<b>90 minutes</b>
4.	<b>Lunch, internal discussions</b>	<b>13:15</b>	<b>14:15</b>	<b>60 minutes</b>
5.	<b>Meeting with graduate students</b> (Bachelor and Master level students randomly suggested)	<b>14:20</b>	<b>15:50</b>	<b>90 minutes</b>
6.	<b>Meeting with teachers</b> /Based on the list that the expert panel suggested/	<b>16:00</b>	<b>17:30</b>	<b>90 minutes</b>
7.	<b>Expert panel discussions</b>	<b>17:30</b>	<b>18:00</b>	<b>30 minutes</b>

21.05.2013

		Launch	End	Duration
1.	<b>Class observation</b>	<b>9:30</b>	<b>10:30</b>	<b>60 minutes</b>
2.	<b>Meeting with heads of chairs</b>	<b>10:35</b>	<b>12:05</b>	<b>90 minutes</b>
3.	<b>Observation of resources</b> Auditoriums, Laboratories, Library	<b>12:10</b>	<b>13:35</b>	<b>85 minutes</b>
4.	<b>Lunch, internal discussions</b>	<b>14:00</b>	<b>15:00</b>	<b>60 minutes</b>
5.	<b>Meeting with Deans</b> /the list is attached/	<b>15:10</b>	<b>16:40</b>	<b>90 minutes</b>
6.	<b>Meeting with employers</b>	<b>16:50</b>	<b>17:50</b>	<b>60 minutes</b>
7.	<b>Expert panel discussions</b>	<b>18:00</b>	<b>18:30</b>	<b>30 minutes</b>

22.05.2013

		Launch	End	Duration
1.	<b>Expert panel discussions</b>	<b>9:30</b>	<b>10:00</b>	<b>30 minutes</b>
2.	<b>Meeting with Administration</b> /the list is attached/	<b>10:10</b>	<b>11:40</b>	<b>90 minutes</b>
3.	<b>Meeting with the staff members of Quality Assurance department</b>	<b>11:50</b>	<b>13:20</b>	<b>90 minutes</b>
4.	<b>Lunch, internal discussions</b>	<b>13:30</b>	<b>14:30</b>	<b>60 minutes</b>
5.	<b>Meeting with the self-assessment working group</b>	<b>14:30</b>	<b>16:00</b>	<b>90 minutes</b>
6.	<b>Observation of students' final papers, thesis</b>	<b>16:10</b>	<b>17:40</b>	<b>90 minutes</b>
7.	<b>Expert panel discussions</b>	<b>17:40</b>	<b>18:10</b>	<b>30 minutes</b>

23.05.2013

		Launch	End	Duration
1.	<b>Expert panel discussions</b>	<b>9:30</b>	<b>10:00</b>	<b>30 minutes</b>
2.	<b>Meeting with invited staff members for clarifications</b>	<b>10:00</b>	<b>11:30</b>	<b>90 minutes</b>
3.	<b>Meeting with students</b> (first to third year students from bachelor level and first year students from master level )	<b>11:40</b>	<b>13:10</b>	<b>90 minutes</b>
4.	<b>Lunch, internal discussions</b>	<b>13:20</b>	<b>14:20</b>	<b>60 minutes</b>

	<b>Meeting with the representatives of Scientific Unit</b> (heads and staff members of the research laboratories)	<b>14:30</b>	<b>16:00</b>	<b>90 minutes</b>
<b>5.</b>	<b>Open meeting</b> (any university representative who would like to have a meeting with the expert panel)	<b>16:10</b>	<b>17:10</b>	<b>60 minutes</b>
<b>6.</b>	<b>Expert panel discussions</b>	<b>17:25</b>	<b>18:00</b>	<b>35 minutes</b>

24.05.2013

		<b>Launch</b>	<b>End</b>	<b>Duration</b>
<b>1.</b>	<b>Expert panel discussions</b>	<b>9:30</b>	<b>10:00</b>	<b>30 minutes</b>
<b>2.</b>	<b>Review of documents / meetings at the dean offices and the chairs/</b>	<b>10:00</b>	<b>13:00</b>	<b>180 minutes</b>
<b>3.</b>	<b>Lunch, internal discussions</b>	<b>13:00</b>	<b>14:00</b>	<b>60 minutes</b>
<b>4.</b>	<b>Expert panel discussions /preparation for the meeting with rector/</b>	<b>14:10</b>	<b>15:10</b>	<b>60 minutes</b>
<b>5.</b>	<b>Meeting with the rector</b>	<b>15:15</b>	<b>16:00</b>	<b>45 minutes</b>
<b>6.</b>	<b>Expert panel final discussions</b>	<b>16:10</b>	<b>18:00</b>	<b>110 minutes</b>

## SHCHEDULE OF SITE-VISITS IN THE BRANCHES

Gyumri branch  
03.06.2013

		Launch	End	Duration
1.	Leaving from Yerevan to Gyumri	8:00	9:30	90 minutes
2.	Meeting with the director of the branch	10:00	10:15	60 minutes
3.	Meeting with the self-evaluation group	10:20	11:05	45 minutes
3	Meeting with the administrative staff	11:10	11:55	45 minutes
4	Meeting with the students (Randomly chosen bachelor and master students)	11:55	12:55	60 minutes
5	Lunch, internal discussions	13:00	14:00	60 minutes
4	Meeting with the teaching staff (with the choice of expert panel)	13:10	14:10	60 minutes
5	Meeting with the deans	14:15	15:00	45 minutes
6	Meeting with heads of chairs	15:10	15:55	45 minutes
7	Observation of resources	16:00	16:45	45 minutes
8	Final meeting with the director	16:50	17:20	30 minutes
9	Leaving from Gyumri to Yerevan	17:30	19:00	90 minutes

Vanadzor branch  
05.06.2013

1.	Leaving from Yerevan to Vanadzor	8:00	9:30	90 minutes
2.	Meeting with the director of the branch	10:00	10:15	60 minutes
3.	Meeting with the self-evaluation group	10:20	11:05	45 minutes
4.	Meeting with the administrative staff	11:10	11:55	45 minutes
5.	Meeting with the students (Randomly chosen bachelor and master students)	11:55	12:55	60 minutes
6.	Lunch, internal discussions	13:00	14:00	60 minutes
7.	Meeting with the teaching staff (with the choice of expert panel)	14:10	15:10	60 minutes
8.	Meeting with the deans	15:15	16:00	45 minutes
9.	Meeting with heads of chairs	16:10	16:55	45 minutes
10.	Observation of resources	17:00	17:45	45 minutes
11.	Final meeting with the director	17:50	18:20	30 minutes
12.	Leaving from Vanadzor to Yerevan	18:30	20:30	90 minutes

Kapan branch

07.06.2013

		Launch	End	Duration
1.	Leaving from Yerevan to Kapan	08:00	14:00	360 minutes
2.	Lunch	14:15	15:15	60 minutes
3.	Meeting with the director of the branch	15:20	15:35	15 minutes
4.	Meeting with the self-evaluation group	15:40	16:25	45 minutes
5.	Meeting with the administrative staff	16:30	17:15	45 minutes
6.	Meeting with the students (Randomly chosen bachelor and master students)	17:20	18:20	60 minutes

		Launch	End	Duration
1.	Coffee /breakfast	08:00	08:30	30 minutes
	Meeting with the teaching staff (with the choice of expert panel)	08:35	09:35	60 minutes
2.	Meeting with the deans	09:40	10:25	45 minutes
3.	Meeting with heads of chairs	10:30	11:15	45 minutes
4.	Observation of resources	11:20	12:05	45 minutes
5.	Final meeting with the director	12:10	12:55	30 minutes
6.	Lunch	13:00	14:00	60 minutes
7	Leaving from Kapan to Yerevan	14:10	20:10	360 minutes

### **APPENDIX 3. LIST OF DOCUMENTS OBSERVED**

1. Chair on Physics- list of laboratory works, explanatory /building 9/:
2. Wave and quantum optics laboratory / building 9/
3. Mechanic and molecule physics laboratory / building 9/
4. Electricity and magnetism laboratory / building 9/
5. Wave and quantum optics laboratory 3b. /building 9/
6. Semiconductor and physics laboratory (lack of power microscope) /building 5/
7. Optoelectronics and semiconductor physics laboratory-equipments are old /building 5/
8. Bar coding technology intradepartmental laboratory-serve nearly to all /building 5/
9. Continuous Learning Centre- well-equipped 5 halls and 2 halls for external services
10. Library – mail reading hall, subscriber division.
11. Recruitment and development division- the number of orders of journals and magazines has reduced due to the attainability of EBSCO u SPRINGER. “Mechanic” journal is available only on-line: