

**“NATIONAL CENTER FOR PROFESSIONAL EDUCATION QUALITY ASSURANCE”  
FOUNDATION**



**EXPERT PANEL REPORT  
INSTITUTIONAL ACCREDITATION OF  
INTERNATIONAL-SCIENTIFIC EDUCATIONAL INSTITUTION  
"PAN-ARMENIAN CENTER FOR EXCELLENCE"  
UNDER "MY STEP" CHARITY FOUNDATION**

**Yerevan – 2024**

## INTRODUCTION

The institutional reaccreditation of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation (hereinafter "Foundation") is carried out based on the application of the educational institution.

The process of institutional accreditation was organized and coordinated by the "National Centre for Professional Education Quality Assurance" Foundation (hereinafter "ANQA"). ANQA was guided by the Regulation on "State Accreditation of RA Education Institutions and Their Academic Programmes" set by the RA Government Decree N978-N, dated June 30, 2011, as well as the Decree N959-N, dated June 30, 2011, on "Approval of RA Standards for Professional Education Accreditation".

The expertise was carried out by the independent expert panel, which consisted of 3 local experts and 2 international experts and was formed in accordance with the requirements set by the ANQA Regulation on "Formation of the Expert Panel."

Institutional accreditation is aimed not only at external quality assurance but also at the continuous improvement of the quality of management and study programmes. Therefore, local, and international experts had two tasks:

1. To carry out an institutional capacity assessment in accordance with RA state accreditation criteria.

2. To improve the quality and carry out an expert assessment regarding compliance with international developments and integration into the European Higher Education Area (EHEA).

The report contains the results of the Foundation's institutional capacity assessment according to the RA tertiary education accreditation criteria and international expert's peer review of EHEA integration.

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## SUMMARY OF EVALUATION

The expertise of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation institutional capacities was carried out by the independent expert panel formed by the requirements of "Regulation on the Formation of the Expert Panel", «National Centre for Professional Education Quality Assurance» Foundation. The evaluation was conducted according to 10 institutional accreditation criteria set by the RA Government Decree N 959-Ն, dated June 30, 2011.

While carrying out the evaluation, the expert panel considered that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" is guided by the strategy of the "My Step" Foundation published in 2023. The Foundation's important strategic goal is to "promote education as a national priority based on teaching the latest technologies in the public and academic environment." The implementation of this goal, as well as the development of human capital and the provision of competitive education, were aimed at the introduction of the "Quantum and Mesoscopic Physics" master's program and the creation of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" as a structure that implements this program.

The Foundation has been operating for only three years; for the first time, it conducted a self-evaluation of institutional capabilities and applied for accreditation. The expert panel also considered the lack of experience when carrying out the evaluation, more closely comparing the goals of the Foundation and the existing opportunities, the developed approaches, the effectiveness of the implemented processes, the level of satisfaction of students and graduates, etc.

In the formulation of the mission of the "My Step" Foundation, the part related to education is not clear enough, and the mission of the TLI, as a structure providing educational services, is not formulated at all. One of the first steps to introduce strategic management of the Foundation is the document the International Scientific Educational Institution "Strategy of Pan-Armenian Center for Excellence" developed for 2024-29 years. However, the expert panel believes that it is necessary to clarify the strategic goals of the Foundation as a center of excellence, plan the expected results, resources, and time frames required for implementation, develop evaluation indicators, etc. based on the results of labour market analysis and discussions with all stakeholders.

The International Scientific Educational Institution "Pan-Armenian Center for Excellence" implements a master's academic program "Quanta" - "Quantum and Mesoscopic Physics", developed by internationally recognized experts in the field. The project's outcome corresponds to the characteristics of the 7th level of the NQF of the Republic of Armenia. The

academic program is unique in the sense that within the framework of the program, students study topics and directions that have not yet been deeply researched in RA. One of the features of the program is the integration of students into international scientific groups through communication with the world's leading scientists. This reflects the international nature of the program and creates opportunities for mobility. Another positive result of the project is the provision of enterprises and research institutes with specialists of a new quality since it is built along the theory-experience-technology chain.

The Foundation's approaches to organizing education are based on classical basic education using modern technologies. In addition to lectures, which last one to two weeks for foreign lecturers, practical and laboratory classes are also used. The approaches and procedures of student assessment are regulated in the master's academic program in the organization of the educational process, but the evaluation forms, components, and criteria are not included in the course programs.

Depending on the nature of the assignment, lecturers choose the components and assessment criteria, which students may not be informed about in advance. The awarding of qualifications is more clearly regulated by the procedure of organizing the defence of thesis papers in the master's degree and the methodological guide for their preparation. The thesis topics are approved by the Scientific Council during the first month of the 1st semester. The group developing the academic program considers the relevance of these topics and the presence of scientific innovation important. The master's student carries out research work with his scientific supervisor, preparing the master's thesis, which is planned to be published in the form of a scientific article. Some of the works of the first graduates of the program have been sent to international journals for publication, and some are still in the process of publication.

As a result of the joint work of the Foundation and academic program responsables, highly qualified faculty from local and foreign countries are involved in the educational process. High-ranking specialists in the relevant fields work in the TLI, which is a guarantee of providing high-quality education and carrying out research work. The academic program can be considered exceptional due not only to the availability of unique courses but also to the high professional level of the faculty. Since the Foundation does not have a main faculty, and every year new contracts are signed with guest lecturers, the expert panel finds that the issues of ensuring the stability of the staff and forming a reliable staff reserve need constant attention. The forms and possibilities of communication between local and international lecturers and lecturers and students also need to be diversified.

The Foundation is provided with the basic resources necessary for the implementation

of the master's program and the achievement of the main strategic goals. It creates a safe and secure environment for students and lecturers. It has an electronic library equipped with professional literature to create the necessary learning environment. The financing of the "My Step" Foundation is a guarantee of stability for the implementation of the project for the next 6-7 years, but the fact of financing from one source is a threat to the continuity of the project, and there is a need to diversify the sources.

Considering the pace of development of quantum physics in the world, the problem of constantly updating and increasing the latest technologies and laboratory base should be kept in mind. The Foundation still faces the problem of equipping laboratories with modern equipment, the solution of which requires a large amount of government financial investments. Before building its resource base, the expert panel suggests expanding existing collaborations and establishing new collaborations with local and international partners to use their laboratory bases. The structure, content, and expected outcomes, teaching and evaluation methods used by the faculty approach to the selection of thesis topics, the processes of organizing their review and defence processes, studies of the faculty and educational environment with existing problems of "Quanta" - "Quantum and Mesoscopic Physics" academic program allow us to conclude that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" generally provides reliable awarding of qualifications. At the same time, there is a need to solve the existing problems quickly and neutralize the existing dangers through clear actions.

The structure of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" does not replicate the traditional university structure. A small staff provides some advantages, but a situation has also developed where the same employee carries out several functions, in some cases inevitably causing a conflict of interest (for example, the head of the educational department is also responsible for quality assurance). Some processes are also not implemented sufficiently due to a lack of human resources (for example, quality assurance and coordination of international relations). The Director of the Foundation makes the main administrative decisions since the Scientific Council is a consultative body. The current structure of the Foundation effectively deprives stakeholders of direct participation in management processes and the ability to make decisions. The Foundation should analyze the compliance of its structure and management system with the strategic goals and consider the issues of its change and increase of staff.

The improvement of the internal quality assurance system, the increase of the human and material resources provided to the QA system, and the increase of the technical abilities of the QA responsible can contribute to the increase of management efficiency. In case of

clarification of the action plan and procedures of internal quality assurance and their implementation, reliable sources and quantity of periodic collection of objective data on the activities of the Foundation and the factors affecting it will be coordinated. The PDCA cycle of quality management will be applied to the implemented processes, the data will be analyzed in time, and it will be possible to make sound decisions based on the analysis results.

The International Scientific Educational Institution "Pan-Armenian Center for Excellence" conducts an active policy of inclusion of applicants, contributing to disseminating information about the program among applicants. Special attention should be paid to the periodic organization of summer schools, which allows applicants to familiarize themselves with the content of the academic program and acquire preliminary professional knowledge during master classes. As a result of the implemented measures, admission to the number of places specified by the license is ensured, but the percentage of students excluded due to insufficient academic progress is worrying. The reasons should be found in the lower admission threshold and the low knowledge of foreign languages. Together with other issues, this problem should also be at the center of attention of the Foundation.

The Foundation takes steps to raise the educational needs of students, and there are examples of how to respond to these needs. Students are satisfied with the additional courses organized and the counselling services provided, and the administrative staff is in constant contact with the students. At the same time, the faculty and students consider it necessary to create such a unified platform, which will provide the opportunity to make available to students all the materials necessary for the organization of the educational process. The first graduates of the "Quantum and Mesoscopic Physics" AP are provided with a job, but not in the direction of the profession they received. The Foundation should promote graduates' careers and create sustainable links with local and foreign institutions, enabling graduates to continue their studies or find jobs in their profession.

The strategic plan of the "My Step" charitable Foundation emphasizes identifying Armenia's research potential in the direction of ICT and its development through international cooperation. Meanwhile, the Foundation has not yet developed any program that would reflect its research interests and ambitions and describe the goals and objectives of the field. Now, the Foundation is ready to finance the participation of students in various international conferences where they can present their thesis research. The lecturers included in the program, and the head of the academic program has extensive experience conducting independent and joint scientific research at their main place of work. There is virtually no lecturer who does not do research.

The expert panel considers that by concentrating the resources of the existing lecturer-

scientists and within the scope of common interests, it is possible to form research groups composed of local and foreign scientists who will carry out work in the direction of the strategic goals of the Foundation in the field of science, by actively involving master's students. A certain accountability system has internal and external components and reports containing factual data on educational processes and financial costs.

Reporting formats and quality need improvement. They should be based on the analysis of actual data confirming the achievement of results, which will also justify the degree of achievement of strategic goals. The Foundation ensures the transparency and accessibility of its procedures and processes to the public through the "My Step" Foundation website. Various social platforms and mass media are also used for that purpose. In addition, targeted works aimed at the development of relations with society, Olympiads, PR campaigns, etc. are carried out. At the same time, the competitive advantages of the program must be more fully presented to stakeholders and the public, which will help increase confidence in the program and attract applicants.

#### **Strengths of the Institution:**

1. the academic program of a unique specialty, which is based on the principle of excellence, in which some subjects are taught for the first time in RA,
2. availability of motivated and high-quality faculty invited from abroad and local universities,
3. the attractiveness of studies for applicants from a financial point of view, since the program is free for all admitted.
4. within the framework of the academic program, the active involvement of students in research activities and their release as ready researchers of the field,
5. organization of additional courses and provision of consultations based on students' educational needs,
6. the availability of mechanisms for ensuring the stability of the faculty, the necessary personnel reserve for the coming years,
7. direct connection between research activities and teaching, application of research results in the educational process,
8. implementation of targeted activities aimed at the transparency of processes,



accountability, and society such as PR campaigns, summer schools, Olympiads, etc., aimed at the transfer of knowledge and values to the general layers of society,

9. external collaborations created opportunities for lecturers to be involved and for student internships to be organized.

#### **Weaknesses of the Institution:**

1. lack of any type of activity planning, including monitoring and risk management plans,
2. the lack of application of the PDCA cycle of quality management in various management processes,
3. insufficient data collection and lack of analysis for project evaluation and management decision-making,
4. the uncertainty of employment of graduates and the actual absence of jobs in the profession acquired,
5. the lack of a multi-component system of periodic evaluation of the faculty,
6. the fact of financing from one source, the absence of a clear policy of financial management,
7. lack of educational laboratories equipped with modern equipment,
8. the lack of cooperation with foreign scientific and educational institutions contributing to the mobility of students (both outbound and inbound),
9. lack of a QA system, QA action plan, and procedures for improving the academic program.

#### **Main recommendations:**

##### **Mission and Purposes**

- Formulate the development vision and mission of the International Scientific Educational Institution "Pan-Armenian Center for Excellence", considering the specifics of the educational services provided, based on discussions with stakeholders.
- Continue the implementation of the strategic management system with appropriate mechanisms and tools.

- Clarify the Foundation's strategic goals based on the results of the discussions with the stakeholders and the labor market analysis. Develop an appropriate strategic plan or road map with a clear timeline, responsibilities, resources to be provided, expected results, evaluation indicators, etc.
- Develop a potential risk management plan for the next 5 years.
- Introduce reporting formats for evaluating the results of strategic plans and objectives.

### **Governance and Administration**

- Analyze the adequacy of the Foundation's existing structure to the strategic goals, considering the possibility of increasing the administrative staff.
- To ensure the collegiality of management, consider changing the Scientific Council's status as a management body.
- Introduce a financial management policy together with the "My Step" Foundation that will enable long-term financial planning based on the strategic plan.
- To ensure transparent and participatory management, develop procedures guaranteeing the participation of stakeholders in decision-making processes.
- Incorporate the PDCA cycle of quality management into the management system to ensure continuous improvement of processes.
- Develop the full amount of information necessary for evaluating the effectiveness of the academic program and other processes of the professions, reliable mechanisms of collection, and scientifically based methods of analysis to ensure their application.
- Use the Foundation's website to provide updated, objective, and unbiased quantitative and qualitative information about the quality of programs and qualifications awarded.

### **Academic programs**

- Create a unified electronic platform accessible to all lecturers and students to make the components of the program and the content of the taught material available to them.
- Through discussions with lecturers, develop a unified policy for selecting teaching and assessment methods and align the subject descriptions with that policy.
- Take measures to develop student mobility by signing cooperation agreements with both RA and foreign universities.
- Increase the volume of laboratory work within the academic program to expand graduates' practical abilities.
- Develop mechanisms and indicators for assessing the academic program's effectiveness, considering the results of the first round of program implementation.

## **Students**

- Revise the admission criteria for the applicants, aligning them with the actual entry conditions of the educational program to reduce the proportion of students who drop out.
- Develop a Student Handbook that will reflect the information students need regarding the Foundation's activities, the procedures for implementing educational processes, students' rights and responsibilities, the content of the educational program, etc.
- Take steps in the direction of increasing the efficiency of services supporting the career of graduates, helping them to work in the profession they have acquired.
- Introduce mechanisms for assessing and ensuring the quality of educational, consulting, and other student services.

## **Faculty and staff**

- Introduce a multi-component system of periodic evaluation of the faculty to evaluate the lecturer's work more objectively and impartially.
- Develop a personnel selection, retention, and promotion policy, considering possibly introducing a teaching assistant institute.
- Regulate the formation of the personnel reserve, specifying the procedure and the responsible persons.
- Introduce mechanisms to increase the efficiency of using foreign lecturers' scientific and teaching potential.
- Create an online forum for lecturers to discuss teaching problems and extract and disseminate good practices.

## **Research and Development**

- Develop and implement a clear policy for the development of the Foundation based on the research and its results, aimed at implementing the foundation's strategic goals.
- Concentrate the resources of lecturers-scientists, form research groups composed of local and foreign scientists, and actively involve master's to carry out work in the direction of the Foundation's strategic goals in the field of science.
- Encourage lecturer-lecturer and lecturer-student joint publications in high-ranking international journals and periodicals in the strategic directions of the Foundation's research field.

## **Infrastructure and Resources**

- Expand existing collaborations and establish new collaborations with local and international partners to utilize their laboratory facilities.

- Take steps to obtain funding from the government or the Ministry of High-Tech Industry to ensure the long-term sustainability of the business.
- Provide financial means to organize services aimed at maintaining the health of employees and students.
- Introduce mechanisms for assessing the applicability, availability and effectiveness of resources provided to students and teachers, as well as resource needs for ensuring the quality of teaching.

### **Societal Responsibility**

- Improve reporting formats and content, aligning them with operations' planned results and making them data-based.
- Develop a comprehensive public relations policy that will include long-term action planning.
- Increase the representation of the TLI on the Foundation's website or have a separate page to contribute to the transparency of the TLI's activities and the dissemination of comprehensive information.
- Analyse the effectiveness of the mechanisms for transferring knowledge and values to society and plan and introduce new mechanisms.

### **External Relations and Internationalization**

- Develop and implement a realistic policy of internationalization and promotion of foreign relations.
- Using the connections of foreign lecturers, form a framework of cooperation with international scientific and educational institutions, contributing to student mobility.
- Consider applicants' mastery of a specified foreign language knowledge as a prerequisite for admission.

### **Internal Quality Assurance System**

- Based on discussions with stakeholders, review, approve, and publish QA policies and procedures, emphasizing quality assurance of the academic program.
- Conduct benchmarking of QA systems of centers of excellence to determine the structure of the Foundation's QA system.

- Consider the possibility of involving an employee responsible for quality assurance and having the employees involved in QA processes participate in field QA training.
- Create a QA action plan based on the PDCA cycle of quality management for all processes and consistently implement activities according to the plan.
- Regulate the responsibilities of all structural units of the QA system within the QA processes of implementing the academic program.
- Clarify the information, sources, and collection mechanisms needed for internal and external quality assessments and analyze assessment results available to stakeholders.

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**Anushavan Makaryan, Chair of Expert Panel**

**29.05.2024**

## DESCRIPTION OF EXTERNAL REVIEW

### COMPOSITION OF EXPERT PANEL

External evaluation of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation was carried out by the following expert panel.

1. **Anushavan Makaryan**, candidate of physical and mathematical sciences, associate professor, acting director of the Ijevan branch of Yerevan State University, head of the expert panel,
2. **Aram Saharyan**, Doctor of Physical and Mathematical Sciences, Professor, Head of the Department of Theoretical Physics of Yerevan State University, Head of the Laboratory of Theoretical Physics of YSU Institute of Physics, member of the expert panel.
3. **Alexander Gusev**, Doctor of Physical and Mathematical Sciences, Professor, Leading Researcher of Information Technologies Laboratory named after MG Mesheryakov, Professor of Dubna State University, an international member of the expert panel,
4. **Maxim Vinichenko**, Candidate of Physical and Mathematical Sciences, associate professor, and lecturer at the Higher School of Engineering Physics of the Institute of Electronics and Telecommunications of St. Petersburg Polytechnic University named after Peter the Great, head of the "Technical Physics" master's and bachelor's program, an international member of the expert panel,
4. **Inna Melkonyan**, 1st-year student of the Department of Bioengineering and Bioinformatics of the Armenian-Russian (Slavic) University, student member of the expert panel.

The composition of the expert panel was agreed upon with the Institution.

The works of the expert panel were coordinated by Varduhi Gyulazyan, Head of the Policy Development and Implementation Division of the ANQA.

The translation was made by Anna Khizantsyan.

All the members of the expert panel and the coordinator have signed independence and confidentiality agreements.

## **PROCESS OF THE EXTERNAL REVIEW**

### **Application for State Accreditation**

To undergo state institutional accreditation, the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation has applied to ANQA filling in the application form according to the set format together with the copies of the license and its appendices.

The ANQA Secretariat examined the information provided in the application and the accompanying documents. Following the decision on the application, a bilateral agreement was signed between the TLI and ANQA. A work schedule has been drawn up and approved.

### **Self-evaluation**

According to the schedule set by ANQA, the institution submitted a self-evaluation of its institutional capacity in Armenian and English and a package of attached documents.

The ANQA coordinator reviewed the report to verify its technical compliance with ANQA. There were some technical and substantive shortcomings, which caused the self-evaluation to be returned to the institution. Then, within the set timeframe, the Foundation submitted a revised version of the self-evaluation, which met the established common format. There were appropriate grounds, and the format required the attachments. Then, the self-evaluation, the package of attached documents, and the electronic questionnaire completed by the Foundation were provided to the expert panel, the composition of which was agreed upon with the Academy in advance and approved by the order of the ANQA Director.

### **Preparatory phase**

ANQA conducted expert training to prepare the expert panel for the work and ensure the

effectiveness of the processes.

Examining the TLI's self-evaluation and package of attached documents, the expert panel conducted a preliminary evaluation according to the format, preparing a list of required documents for further study and issues and questions, indicating the relevant departments or target groups. During the preliminary evaluation, expert panel members conducted class observations and participated in the examinations. Then, the expert panel summarized the results of the preliminary evaluation and made a plan-schedule for the expert visit.

The schedule, guided by the ANQA Accreditation Manual, includes expert meetings with all groups, open and closed meetings, document reviews, and more.

### **Preliminary visit**

On March 18, 2024, a meeting was held with the management staff of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under the "My Step" Charity Foundation. Throughout the said visit, the plan-schedule of the site visit was agreed upon, and discussions and mutual decisions were reached referring to organizational, technical, and informative questions of the site visit, as well as the conduct and the norms of ethics of meeting participants. The conditions for the focus group meetings and the work of the expert panel were discussed.

### **Site visit**

The site visit took place from April 3 to 5, 2024. It started with a closed meeting, which aimed to discuss the scope of the expert evaluation, the issues to be studied during the visit, the strengths, and weaknesses of the TLI according to the criteria, the focus group procedure, and clarify further steps.

The expert panel, ANQA coordinator, and translator were present during the visit. The site visit started with a meeting with the Foundation rector and ended with a meeting with the TLI managerial staff. The participants (teachers, students, heads of chairs, employers, and alumni) of focus group meetings organized to clarify the questions were selected from the list provided in advance by the university. All scheduled meetings were held. During the planned



visit, the expert panel also reviewed documents and resources. During the closed meeting of the expert panel held at the end of each working day of the visit, interim results of the expert evaluation were presented and at the end of the visit, the main results of the visit were summarized in a closed discussion. The expert evaluation was carried out within the framework of the ANQA procedures and State Accreditation Criteria and Standards, which provide for a two-tier rating scale: satisfactory and unsatisfactory.

### **Expert panel report**

The expert panel conducted the preliminary assessment based on the electronic questionnaire filled out by the TLI, the self-evaluation submitted, the examination of the attached documents, and the site visit (because of regular discussions). Based on the observations made after the discussions, the expert panel and ANQA coordinator prepared the preliminary version of the expert report.

Regarding the preliminary version of the report, the Foundation presented its response to the ANQA on 22.05.2024. The ANQA provided the Foundation's observations to the expert panel. Considering the Foundation's observations, the expert panel made the final version of the expert report and provided it to the TLI on 29.05.2024.

**Varduhi Gyulazyan**

**Coordinator of the Expert Panel**

**29.05.2024**

## EVALUATION ACCORDING TO ACCREDITATION CRITERIA

### BRIEF INFORMATION ABOUT THE EDUCATION INSTITUTION

#### **History:**

The "My Step" charitable foundation established the international scientific-educational institution "Pan-Armenian Center for Excellence". The institution's mission is to provide high-quality education, train great specialists, and contribute to advancing science in RA.

The Institution develops and implements master's academic programs, enabling graduates to engage in scientific research work, form startups, and contribute to establishing high-tech companies in Armenia, thereby supporting the preservation and expansion of the country's scientific and technological potential.

The Institution involves the leading potential of RA or abroad in developing its master's program initiatives.

#### **Education:**

Through the acquisition of an activity license, the international scientific-educational institution "Pan-Armenian Center for Excellence" launched the "Quanta" master's program in "Quantum and Mesoscopic Physics" in 2002, lasting one and a half years. The master's program was developed in cooperation with the professors at the Institute of Engineering Physics of the Russian-Armenian (Slavic) University, the Institute of Physical Research of the National Academy of Sciences, and the Department of General Physics and Quantum Nanostructures of the Russian- Armenian-(Slavic) University.

Following the principle of exclusivity, the center attracts highly qualified lecturers invited from leading universities from abroad.

#### **Research:**

Students' graduation work is supervised by highly qualified lecturers from Armenia and abroad, who are the best in their fields. The invited lecturers from abroad teach at universities with high positions in the QS rankings (Berkeley, 10th, ITMO, 542nd, etc.). Master's thesis

topics are research-oriented and innovative, and after the defense, they will be published in at least a Q-3 journal.

**Source:** sources for the identification of facts in the above-mentioned fields are the documents provided by the TLI (e.g. self-evaluation report, strategic plan, action plan, plans of the departments, concept APers, etc).

## CRITERION I. MISSION AND PURPOSES

**CRITERION:** The Tertiary Level Institutions' (TLIs) policy and practices are in accordance with its mission, which is in accordance with the Armenian National Qualifications Framework (hereafter ANQF).

### **FINDINGS:**

The mission of the "My Step" charitable Foundation is formulated in the "My Step" Foundation-Strategy document published in 2023. The Foundation considers its mission to "discover and develop the full potential of the Armenian person, which will enable the formation of a healthy and conscious society, and as a result, a safe and developed state, to implement programs aimed at the development of human capital, with the priority of giving people knowledge and skills." One of the Foundation's important strategic goals is to "promote education as a national priority based on the teaching of the latest technologies in the public and academic environment." One of the steps aimed at the realization of this goal, as well as the development of human capital and the introduction of competitive education, is the creation of the International Scientific Educational Institution "Pan-Armenian Center for Excellence".

The Center of Excellence is guided by the "My Step" Foundation's published strategy for 2023, in which the first of the included "strategic programs" refers to the "Quantum and Mesoscopic Physics" master's program and the Foundation implementing it.

Based on the Foundation's strategy, the document "International Scientific Educational Institution "Pan-Armenian Center for Excellence" was developed, which is planned for 2024-29. Actions in three directions are specified as strategic priorities for those years.

1. it is planned to introduce several other master's programs, such as bioinformatics, artificial intelligence, robotics, optoelectronics tracks,
2. to continue sending students to conferences,
3. cooperate with international and local companies to provide a laboratory base and graduates with jobs.

The strategy divides these actions into long-term (1 year), mid-term (6 months), and short-term (3 months) measures. Strategic goals, expected results, responsibility for their implementation, and evaluation indicators are not specified. The strategy does not formulate the center's mission as an educational service provider.

The self-evaluation specifies the main groups of internal and external stakeholders of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" are

specified.

- students and applicants,
- faculty,
- administrative and support staff,
- RA Ministry of Education, Science, Culture and Sports,
- the community of Armenia,
- diaspora.

At the same time, students whose needs are surveyed are considered the main stakeholders of the Foundation. Real internal and external stakeholders were not involved in their development process. One student was included in the working group that conducted the self-evaluation, and no external stakeholders participated in the self-evaluation or its discussion.

As a mechanism for evaluating the results of the mission and goals, the Foundation uses periodic reports, although there are no established procedures and formats for their submission. At the end of each period (long-term, mid-term, short-term), a summary of the results is carried out, which the Foundation considers as a process implementation monitoring. Without a strategic action plan, financial costs and curriculum implementation issues are analyzed every six months at the end of each year. As a result, decisions were made on eliminating repetitions in various subject programs, increasing the effectiveness of seminars conducted by the lecturers, and other related issues.

The director prepares the annual activity report for the Foundation, which is submitted to the "My Step" Foundation. The Executive Director then submits the report to the Board of Trustees. The activity reports are included in the "My Step" Foundation's reports separately and are available on the foundation's website.

## **CONSIDERATIONS:**

The expert panel discussions concluded that the strategic management of the International Scientific Educational Institution "Pan-Armenian Center for Excellence "is at the implementation stage. One of the first positive steps is the "Strategy of the International Scientific Educational Institution "Pan-Armenian Center for Excellence "developed for 2024-29. However, in the absence of clear strategic goals, expected results, those responsible for their implementation, and evaluation indicators, it is difficult to assess and manage the achievements, development trends of the Foundation, and gaps. Based on discussions with all stakeholders and the results of the labor market analysis, the expert panel considers it necessary to clarify strategic goals, making the institution's status as a center of excellence more visible. Then, develop a strategic plan or road map to achieve the goals with a clear

timeline and expected results. Equally important is the definition of action responsibilities and evaluation indicators to define the organizers of planned processes and the necessary information to be collected to demonstrate progress.

Although internal and external stakeholders did not participate in developing the institution's strategy and planned activities, the participants in the expert panel meetings acknowledged the importance and effectiveness of the actions implemented, as it was important to "ensure at least the number of students admitted according to the number of licenses" and their satisfaction with studies. At the same time, the expert panel believes that the stakeholders need to be informed about the implemented processes, feedback mechanisms activated, and new ones introduced. Communication with potential employers should be essential, as the institution states in its weaknesses that for graduates, "the uncertainty of obtaining a job can lead to a deficit in student participation."

The part related to education in the formulation of the mission of the "My Step" Foundation is not clear enough. It covers "from the public education to the academic sphere," and the mission is not formulated in the Foundation's strategy as a structure providing educational services.

The implemented educational program corresponds to the requirements of the 7th level of the NQF. The expert panel believes that the Foundation should first address the long-term vision of its activities in its strategic documents, reflecting the place and position the Foundation wants to occupy in the future in the local and international education markets. Then, it is necessary to develop and make available to all stakeholders a mission statement emphasizing the characteristics of the perception of excellence, the academic program, and the graduates, which will be acceptable to all stakeholders and will become a guide for activities.

The main groups of internal and external stakeholders of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" are specified only in the self-evaluation among the documents available to the expert panel. At the same time, this specification should be made in any strategic document available to the stakeholders. If the needs of students, as the center's main stakeholders, are to some extent raised through surveys, structures for increasing the needs of other groups of internal and external stakeholders are not yet implemented. If the needs of all stakeholders are considered during the development of the Foundation's mission, goals, and Strategic Plan, and if they are involved in various processes, their activity and responsibility for realising these goals will increase.

## **SUMMARY:**

Considering the fact that the International Scientific Educational Institution "Pan-Armenian

Center for Excellence" is guided by the mission of the "My Step" Foundation, implements the academic program of the 7th level of the RA NQF, strategic management approaches are introduced in the institution, in line with the strategy of the "My Step" Foundation, a strategy for the next five years has been developed with three program directions and measures, internal and external stakeholders participating in the meetings accept the goals and activities of the Foundation as effective, use periodic reports as a mechanism for evaluating the results of the mission and objectives, the expert panel considers that the Foundation meets the requirements of Criterion 1.

#### **CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 1 is satisfactory.

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

**CRITERION: The TLIs' system of governance, administrative structures, and their practices are effective and intend to the accomplishment of its mission and purposes by keeping the governance code of ethics.**

#### **FINDINGS:**

According to the structure presented to the expert panel, the governing bodies of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Foundation are:

- Board of Trustees of "My Step" Foundation,
- Executive Director of "My Step" Foundation,
- The director of the Foundation.

Management functions are performed in a particular order. The "My Step" Foundation Board of Trustees approves the strategy, plans, and budget. It appoints the Executive Director, who is accountable for the activities of the entire Foundation, including the International Scientific Educational Institution "Pan-Armenian Center for Excellence". The executive director of the Foundation carries out the day-to-day management and hires department heads, including the head of the Foundation. In the annual report of the executive director, there is a section dedicated to the activities of the Foundation.

The Director of the Foundation carries out the current management and organization of

the Foundation's activities. The Foundation's charter defines its powers. He submits an annual activity and financial report to the Foundation's Executive Director. In the structure of the Foundation, there is a scientific council, which is considered an advisory body but has decision-making powers according to the charter.

During the site visit, it became clear that the Scientific Council is responsible for the content of educational and scientific works, examines and approves the topics of master's theses, and recommends them to the lecturers. Regarding the academic program, the director has not rejected the Scientific Council's recommendations, but management proposals have been rejected. Rejections are not considered a violation of management ethics, as they occur after discussions. The director also supervises the implementation of the Scientific Council's decisions.

The International Scientific Educational Institution "Pan-Armenian Center for Excellence" has no other divisions. To carry out administrative functions, one person in charge of education and one laboratory worker is also employed, whose functions are defined by the positions' passports. The Foundation did not analyze the chosen structure's compliance with the strategic goals, nor was the efficiency of the existing management system studied.

The administrative staff are provided with material resources (working space in "My Step" Foundation and leased premises at YSU, computer equipment, Internet connection, etc.). The Foundation does not have a separately developed financial resource distribution policy. The financial issues are discussed orally with the Foundation's financier. Each year, a cost estimate is drawn up for the entire academic period, where the main points are salaries, transportation and accommodation of teaching staff, acquisition of technical equipment, repairs, and other expenses. Every month, the Director of the Foundation submits a report for the approval of the Director of the Foundation on the expected financial costs, which the Foundation provides.

For now, the Foundation does not put the task of evaluating the effectiveness of the management of the selected structure and allocated financial resources. In the self-evaluation and during the meetings with the expert panel, the Foundation's managers emphasized the stakeholders' direct participation in the management and decision-making processes. However, the actual situation is that the existing structure of the Foundation creates few opportunities for stakeholders to participate in decision-making related to them. Neither students nor external stakeholders are involved in the Scientific Council's work.

Procedures guaranteeing the participation of students and lecturers in decision-making processes are missing. The relevant policy is planned to be developed. Student surveys are considered a mechanism of participation in the management process. Management considers



the results of the surveys when making decisions in the following year, for example, when hiring a lecturer. The Scientific Council and the Director of the Foundation solve the problems reported by the lecturers through personal contacts.

The institution has not yet analyzed to what extent these approaches to lecturers' and students' involvement in the decision-making process are effective and to what extent they are satisfied with their involvement.

According to the self-evaluation, the Foundation's activities are planned based on the document "Strategy of the International Scientific Educational Institution "Pan-Armenian Center for Excellence," where "long-term (5 years), mid-term (2 years) and short-term (up to 1 year) programs are developed according to each point."

The presented planning periods do not correspond to the periods indicated in the strategy. Although the strategy was developed for 2024-29, the document considers long-term planning to be one year, mid-term planning to be six months, and short-term planning to be three months. During the meetings with the expert panel, the Foundation managers mentioned that "planning is done every year."

However, the expert panel was not provided with a time frame or action plan apart from the strategy. At the end of the year, a report summarizing the completed works is prepared, and the Foundation's director decides who will participate in the summary session. The Foundation considers this summary to be both an evaluation and a monitoring of results. Through reports, the Foundation "regularly submits the current budget, information on the progress of the planning policy, as well as the data of the recorded results to the bodies created by it".

The Foundation emphasizes studying factors affecting its activity and decision-making based on data analysis. Among the external influencing factors, the changes in existing laws regularly implemented in the field of education are considered, and internal data are collected:

- from students' evaluations of lecturers' work,
- regular discussions with students and lecturers,
- checks of financial means before the start of the academic year.

The managers of the Foundation assured that in the past two years, the activities of the Foundation continued as normal, and the Foundation did not record any significant factors affecting its activities, so they saw no need for additional analysis.

The approved policy and procedures for ensuring the quality of management and administration of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" have not been developed. Apart from the self-evaluation, the experts were not presented with any document establishing the requirement for applying the PDCA principle

of quality management to the processes carried out in the Foundation.

The interpretation of the PDCA principle presented in the self-evaluation differs from the accepted approaches. The management cycle begins with the problem-do phase. P-planning is considered "development, adoption and publication of the draft decision/order," D-Do is the implementation of a solution fixed by the order by a department or employee, and C-check is "the result is evaluated during the analysis and monitoring of the performed work." Without the "Act" phase, the cycle chain is broken, which should have ensured the continuous improvement process.

The self-evaluation states that "problem-solving and process improvement steps are developed, which are included in the next year's planning" or "the institution's director carries out planning activities, considering risk prediction scenarios," but the processes are not documented. The Foundation still does not analyze to what extent the application of its perception of the PDCA principle contributes to management efficiency and quality assurance.

The following mechanisms are used to evaluate the effectiveness of the academic program implemented by the Foundation:

- Conducting written surveys among students using the "Course Evaluation Surveys".
- Gathering student suggestions during meetings and discussions.

The "Course Evaluation Survey" also collects information about the faculty.

The Foundation notes that the information provided by the lecturers is collected during the sessions of the scientific council and consultations with the latter. Still, the expert panel was not provided with analyses of such information. The Foundation does not analyze the effectiveness of the evaluation mechanisms of the academic program and other processes, finding that "the system of information collection and evaluation is effective because it is carried out anonymously."

The Foundation disseminated information at meetings with students through materials distributed by the media and posted on its website and social media pages.

The Foundation's website regularly posts information about the academic program and invites lecturers from abroad. The Foundation also hosts a series of interviews with students in which they present the academic program, the quality of teaching, etc. The expert panel's studies have shown that these are more marketing and advertising publications than up-to-date, objective, and unbiased quantitative and qualitative data about the quality of programs and qualifications awarded. The Institute evaluates the effectiveness of the provided qualitative and quantitative information by admitting fifteen students for the second year. The effectiveness of the evaluation mechanisms for publishing qualitative and quantitative information provided by the Foundation is not evaluated.

## CONSIDERATIONS:

The International Scientific Educational Institution “Pan-Armenian Center for Excellence” has a non-traditional university structure and uses unique approaches. Along with the advantages characteristic of a small staff (mobility, direct management connections, budget savings, etc.), a situation has developed when the same employee performs several functions, in some cases inevitably causing a conflict of interests (for example, the person in charge of training processes is also the person in charge of quality assurance). Some processes are also not implemented sufficiently due to a lack of human resources (for example, quality assurance and coordination of international relations).

The expert panel recommends that the Foundation analyze its structure's compliance with the strategic goals and consider increasing staff. The Director of the Foundation makes the main management decisions as the Scientific Council is considered an advisory body. In addition, the self-evaluation states that the recommendations of the Scientific Council can be rejected by the director, which is not considered a violation of management ethics (rules of ethics or courtesy have not yet been developed at the Foundation). From the point of view of ensuring the collegiality of management, it may be appropriate to change the status of the Scientific Council and transform it into a management body.

It is positive that the Foundation has adequate financial means to organize its educational and other processes. However, the Foundation did not develop a financial management policy because it did not set the problem of evaluating the effectiveness of financial management. The expert panel believes it is necessary to introduce such a policy together with the "My Step" Foundation, which will provide an opportunity to carry out long-term financial planning to ensure the target implementation of the goals of the SP to be reviewed.

It is positive that the Foundation strives to be an educational institution with transparent management and values the direct participation of stakeholders in management processes and decision-making. However, the current structure of the Foundation deprives the stakeholders of that opportunity, which, according to the expert panel, is a weakness for the Foundation. The lack of policies and procedures guaranteeing the participation of students and lecturers in decision-making processes is also a problem, which would make management truly transparent and participative. It would increase the responsibility of internal stakeholders from the viewpoint of implementing decisions.

Apart from the strategy of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" program document, the expert panel considers the Foundation's lack of any activity plan and regulated monitoring mechanisms a weakness

because it means the absence of an important toolkit for implementing the mission and goals. Suppose the Foundation values the study of the factors affecting its activity and relies on reliable data when making decisions. In that case, it should organize its activity in that direction with the observation of the expert panel. There is a need to bring up the list of external and internal environmental factors that affect the activities of the Foundation and to carry out a multi-faceted analysis of these factors (labor market, technological development, demographic changes, etc.). In addition, it is necessary to list the sources of data obtained.

According to the expert panel, based on the analysis, the list and amount of data collected now will not allow justified changes in planning. Applying the PDCA cycle to management can ensure a continuous improvement process. The expert panel believes the Foundation should document the requirement to be guided by this director, clarify the importance of the "act" phase to analyze the results preceding the planning process and justify proposals for changes.

The Foundation collects and analyzes certain information about courses and teaching quality. However, the expert panel finds that the information collected is insufficient to evaluate the academic program. The evaluation of the program's quality can be considered from the point of view of the criteria and standards of the accreditation of RA academic programs (Decision No. 959-N of June 30, 2011). The situation is the same in the case of other processes of education organizations. Conducting surveys anonymously cannot testify to the effectiveness of the evaluated mechanisms should also be considered.

It is positive that the Foundation organizes active advertising campaigns to introduce the "Quanta" program, coverage of the summer school, lecturer-student opinions, and other events. However, the expert panel considers that in addition to this, the stakeholders should be given quantitative and qualitative updated and unbiased information about the quality of the program and the awarded qualifications while evaluating the effectiveness of the information provision mechanisms.

#### **SUMMARY:**

Considering that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" did not analyze the structure's compliance with the strategic goals, the internal stakeholders are not involved in their decision-making. There is no approved clear policy of financial management, there are problems related to long-term and mid-term planning, there are no clear mechanisms for monitoring the implementation of plans, the PDCA cycle is not implemented in various management processes, sufficient data are not collected and analyzed for program evaluation and decision-making, information dissemination mechanisms regarding the quality of programs and awarded qualifications are

not evaluated, the expert panel finds that the Foundation does not meet the requirements of criterion 2.

**CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 2 is unsatisfactory.

### **CRITERION III. ACADEMIC PROGRAMMES**

**CRITERION: The programmes are in concord with the institution's mission, form part of institutional planning and promote mobility and internationalization.**

**FINDINGS:**

In 2022, the International Scientific Educational Institution "Pan-Armenian Center for Excellence", created by the "My Step" charity foundation, initiated the implementation of the "Quanta" one-and-a-half-year master's academic program in "Quantum and Mesoscopic Physics." The master's academic program was developed by the professors at the Institute of Engineering Physics of the Armenian-Russian (Slavic) University, the Institute of Physical Research of the National Academy of Sciences, and the Department of General Physics and Quantum Nanostructures of the Armenian-Russian (Slavic) University. The academic program is unique and was implemented for the first time in RA.

The academic program corresponds to the mission of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" in that it aims at forming human capital in RA in directions that are the basis for technological progress, particularly in the field of quantum physics. It became clear from the site visit that the "Quantum and Mesoscopic Physics" academic program is significant because, within the framework of the program, students study topics and directions that have not yet been deeply researched in Armenia, for example, atomic optics, graphene physics, quantum cryptography. Etc. As a result of this academic program, students acquire professional theoretical knowledge and practical skills in quantum physics and photonics. The program includes a theoretical and an applied part, with great attention paid to the research component.

The AP is detailed in terms of expected outcomes in three sections:

- Professional knowledge and understanding,
- Practical professional skills,
- Generic/transferable/ skills.

The curriculum of the master's program includes modern courses corresponding to the program's content, which are presented by highly qualified lecturers in the relevant field. The study of the subject descriptions shows that they are compiled in a unified format, where the outcomes, the purpose and problems of the subject, the place and role in the professional academic program, the forms of classes, the studied topics, and the recommended literature are described. As a result of the observations of the expert panel, some problems related to descriptions were also highlighted.

Assessment forms and criteria are not included; individual items are not included in the specifications of some subjects, the descriptions are too brief, and one of the specifications does not mention basic literature.

The first graduates of the program were in 2024. During the meeting with the group implementing the program, it became clear that the evaluation of the results is planned so that corrections can be made. The meetings also clarified that identifying problems and providing their current solutions was also important during the program's implementation. Considering the students' basic knowledge in the direction of physics, changes were made in the order of the courses, as well as the transfer of broader and deeper knowledge was combined with accessible and narrow professional knowledge so that students could acquire systematic knowledge and abilities in the field of quantum physics through independent work.

The Foundation's policy of organizing education is based on classical basic education using modern technologies. In addition to classical lectures, which in the case of foreign lecturers last for a week or two, practical and laboratory classes are also used. Lecturers are in constant contact with students via e-mail.

There is no policy on selecting teaching and learning methods within the program's framework, but the lecturers, being highly qualified scientists and practitioners, use teaching and learning methods that correspond to the courses' defined outcomes. Methods include lectures, demonstrations, thematic discussions, presentations of independent work, problem-solving during practical classes, presentations at seminars, study, and presentation of laboratory experiments. The methods are revised based on the results of student surveys and their analysis.

From the site visit, it became clear that lecturers assign students tasks to develop research skills. For example, foreign lecturers instruct students to study scientific articles on the subjects, prepare reviews and discuss and present the results in English during seminars.

Students carry out laboratory work and calculations in the educational laboratories of YSU Optics and Atomic Physics and the quantum nanophononics laboratories of the Armenian-Russian University. Lecture materials are provided to students in advance. The

approaches and procedure of student assessment are included in the order of organization of the educational process in the master's academic program of Foundation. A student's grade is summarized once a semester based on the current test and summative exam components. It became clear from the expert study that there are no assessment forms, components, or criteria in the course programs. The lecturers choose the assessment components and criteria depending on the nature of the task. According to the curriculum, practice is pre-diploma and is carried out in parallel with the theoretical part.

During the site visit, it became clear that due to the lack of laboratories, students currently do not have the opportunity to carry out applied research for a longer period. The faculty also considers the practice of intermediate assessment of students in the case of a short cycle course ineffective.

All processes for implementing summary attestation are regulated. The teaching lecturers present thesis topics during the first month of the first semester, and the academic council approves them. It became clear from the site visit that the group developing the academic program considers the relevance of thesis topics important, and they are developed in cooperation with foreign lecturers. The completion of the thesis is monitored based on the results of the work done at the end of certain defined stages, according to a defined schedule. Each master has a scientific supervisor, with whom he carries out research work, preparing the master's thesis, which is later planned to be published as a scientific article. During the site visit, it became clear that some works had been sent for publication, and some were still in progress. Two of the articles were sent to international journals for publication. The main monitors of academic integrity are the lecturers who supervise the students' research work. The organization of external review also contributes to this.

The "Quantum and Mesoscopic Physics" academic program was based on the studies of the academic programs of Yerevan State University and St. Petersburg State Polytechnic University. There is no formal student mobility due to a lack of agreements. Within the program, there is feedback from both students and lecturers. Each semester, surveys are conducted among students. In them, students evaluate the importance of the course in terms of professional development, teaching methods, research component, access to the course, and classroom conditions. If necessary, measures to improve methods are implemented. The scientific council of the centre discusses with the lecturers the problems related to the content of the academic program and makes changes in case of necessity. For example, when studying students' problems, the number of hours devoted to the basics of quantum mechanics increased.

## CONSIDERATIONS:

Examining the content and implementation of the academic program, the expert panel positively evaluates its exclusivity, which fully corresponds to the institution's mission: "to contribute to the development of human capital in RA." One of the main positive features of the program is integrating students into international scientific groups through communication with the world's leading scientists. This reflects the international nature of the program and creates opportunities for mobility. Another positive result of the program is that it provides enterprises and scientific research institutes with specialists, as it is structured in the theory-experience-technology chain.

One of the key features of the academic program is not the preparation of "yesterday's" optoelectronics specialists with old textbooks but the preparation of modern quantum physics specialists for "tomorrow" with the latest achievements of modern science. One of the objectives of the program's implementation policy should be mentioned separately: preserving Armenia's intellectual capital and stopping the "brain drain."

The expert panel considers it positive that exceptional directions are being studied within the program's framework, which will contribute to providing graduates with relevant knowledge and skills today. It is positive that lecturers use various teaching methods to promote the students' research skills. At the same time, the expert panel considers it essential to organize discussions with lecturers to exchange experience on teaching methods, which will contribute to developing common policies and disseminating good practices. It is also important to create a unified electronic platform, which will enable lecturers to familiarize themselves with the materials provided by each other and will create wider opportunities for communication with students.

The expert panel positively considers the selection of current topics of the thesis papers and their research orientation, because of which students develop analytical abilities. It is positive that the results of the thesis papers become articles, contributing to the publicization of scientific results. It is positive that the implementation of summative certification and awarding of qualification at the Foundation are regulated, and in the educational process, the approaches of student evaluation are included. However, due to the expert panel, the evaluation forms, components, and criteria chosen by the lecturers should be published in advance in the course programs and made available to the students. The internship program and evaluation criteria also need clarification.

The teaching of foreign lecturers is carried out during a relatively short visit to RA. Considering the latest achievements of modern science are included in the subject programs. Their assimilation requires a significant base of prior knowledge and time; the expert panel



finds that the short visits create certain difficulties for the in-depth assimilation of the subjects and the intermediate assessments of the students, which were mentioned by the lecturers and students participating in expert meetings. It is necessary to make the communication between students and lecturers permanent and daily. The main part of the subjects also has a technological and applied orientation, and an important task is expanding the laboratory support through cooperation with the scientific centres and universities of the RA.

The expert panel also notes that at this initial stage of the academic program, it is important to evaluate the effectiveness of the cycle. This will include discussions with lecturers, studies of the opinions of the graduation committee, and discussions with alumni. This will facilitate the implementation of targeted changes based on accumulated experience.

#### **SUMMARY:**

Considering that the educational program of a unique speciality is based on the principle of excellence, including subjects that are being implemented for the first time in RA, internationally renowned specialists of the field were involved in the development of the program, the program is in line with the institution's mission, is an integral part of the institution's planning, corresponds to the 7th level of the NQF and ensures the continuity of education, it is described according to the expected learning outcomes of the awarded qualifications, the professors use student-centred methods of teaching and learning assessment, there are mobility opportunities for students, the expert group considers that the Foundation meets the requirements of Criterion 3.

#### **CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 3 is satisfactory.

### **CRITERION IV. STUDENTS**

**CRITERION: The TLI provides relevant student support services ensuring the effectiveness of the learning environment.**

#### **FINDINGS:**

The selection and admission of students at the International Scientific Educational Institution "Pan-Armenian Center for Excellence" are organized according to the procedure for organizing and interviewing the Foundation's master's degree admission. To ensure the desired number of students, the defined actions envisage the implementation of clear

mechanisms for recruiting, selecting, and admitting students. The website of the "My Step" Foundation provides relevant information on admission. Applicants pass exams in physics and higher mathematics.

The exam questionnaire and the evaluation procedure are also posted on the website so that applicants can familiarize themselves with the necessary information before taking the exams. The Foundation fixed the entrance exam time, and the PR campaign started. To present the program, visits are being made to various universities with bachelor's programs in physics-mathematical and engineering directions. Advertising posters are placed in public places, such as on the subway. An Olympiad and a ten-day summer school are organized. The monitoring of admission results showed that the Olympiad was not successful.

Within the framework of the organized summer school, master classes in quantum physics are conducted for students. The academic program is free; it is financed by the "My Step" Charitable Foundation, which provides 1.5 million drams for each student. As of 2024, 22 students studied at the Foundation. In 2024, the Foundation will have its first graduates. The Foundation considers the effectiveness of the mechanisms for the recruitment, selection, and admission of students to be sufficient, as the admission of the planned number of students is ensured. It was presented in the self-evaluation, which was also confirmed during the meetings held during the site visit, that the Foundation uses course evaluation surveys and organizes periodic meetings with students to evaluate their needs. However, the analysis of survey results is not presented to either students or lecturers.

During the meetings held during the site visit, the students also mentioned that they turn to the head of the educational department and the director of the Foundation for administrative issues. They turn to the lecturers directly for issues related to the course process. The Foundation values the observations of the main stakeholders, the students, about the program's implementation. Based on the students' observations, the employment contract with one lecturer was terminated. Based on their proposal, it was decided to start the classes at 5:00 PM instead of the previous 4:00 PM starting from the academic year 2023-24, considering the classes' overlap with the students' working hours.

The meetings held during the site visit also revealed that students and graduates value increasing the number of hours of laboratory work and expanding practice. Emphasizing the students' professional progress, the Foundation organized additional courses in quantum informatics at the students' request. Considering the students' basic knowledge, the lecturers also adapted the presented material to the students' needs, detailing the material if necessary. Students can contact their academic supervisor and faculty for additional advice if they are satisfied with the advice provided.

The Foundation cooperates with institutions, including YSU, Armenian-Russian University, Institute of Physics of the National Academy of Sciences, and RA Ministry of High-Tec Industry, to support graduates' careers. From the meeting with the graduates, it became clear that 15 were employed by profession before graduation, and one student was unemployed. In addition, within the program's framework, students are also prepared to start their businesses. Thus, four of the first graduates founded their start-ups. Students also learn about conferences and seminars in the field from their professors. Thus, they participated in conferences and seminars on nanophysics, quantum computers, astronomy, and supercomputers.

The site visit clarified that a large portion of the master's program is allocated to the research component. The topics and problems of the master's thesis are chosen so that the results contain scientific novelty and are published as articles, both individually and in collaboration with lecturers. There are cases where students have been involved in scientific grant programs as researchers. The rights and responsibilities of students are fixed in the contracts signed with them.

Given the small number of students and the existence of direct contact with the management staff, neither the students nor the Foundation's management see the need for a body to protect students' rights. The meetings during the site visit made it clear that the mechanisms of evaluation and quality assurance of educational, counselling, and other student services are in the implementation stage. In that direction, the head of the educational department, who is also in charge of quality assurance, carries out surveys, organizes meetings and focus group discussions, and cooperates with students to discover their problems.

#### **CONSIDERATIONS:**

The expert panel positively evaluates the steps carried out by the International Scientific Educational Institution "Pan-Armenian Center for Excellence", contributing to disseminating information about the program among applicants. Particular attention should be paid to the organization of the summer school, which enables applicants to familiarize themselves with the program's content and acquire preliminary knowledge during the master classes. It is positive that, because of the implemented actions, it is possible to carry out admissions in the amount of license seats. However, the expert panel sees a problem where only 10 out of 15 graduates were admitted in 2024. That means more than 25% of those admitted could not continue their studies.

During the meeting with the expert panel, the lecturers mentioned that they "sometimes have to adapt the program to the student's level of knowledge", which is unacceptable. These facts indicate the need to revise the admission criteria.

The expert panel positively assesses that the students, as the main stakeholders of the academic program, can constantly present their observations, which results in improvements in the educational processes. At the same time, the expert panel mentions the importance of developing a student handbook, which will provide students with the necessary information about the Foundation's activities, the procedures for implementing educational processes, the content of the academic program, etc. It is positive that because of surveys, meetings and direct contacts, students' needs are highlighted, and solutions are provided, which is one of the keys to an effective student environment. The expert panel considers it positive that counselling and additional courses are organized for students to ensure their professional progress.

At the same time, the expert panel considers it important to create a platform that will allow students to access all lecturers' materials. Although the graduates are mostly secured with jobs, the Foundation takes steps to promote their careers. At the same time, the expert panel considers it important to create stable connections with local and foreign institutions, enabling graduates to get a job in their profession. The expert panel positively considers the involvement of students in research works, which contributes to the professional advancement of students and the development of analytical and research thinking.

#### **SUMMARY:**

Considering that the current mechanisms of student recruitment and selection ensure the necessary number of students, the educational needs of students are highlighted in various ways, there are examples of responding to the educational needs of students, additional courses are organized and counselling services are provided to students, the administrative staff is in constant contact with students, students are actively involved in research activities, the expert group finds that the Foundation meets the requirements of Criterion 4.

#### **CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 4 is satisfactory.

### **CRITERION V. FACULTY AND STAFF**

**CRITERION:** The TLI has a highly qualified teaching and supporting staff to accomplish the institution's mission and to implement the goals set for academic programmes.

## **FINDINGS:**

From the beginning, the Foundation has set the goal of involving highly qualified faculty invited from abroad in the educational process. The head of the academic program formed the scientific group, which included selected scientists from Armenia and abroad who are leaders in the chosen fields of science and technology and have significant teaching experience, using the existing international scientific connections. International recognition of scientists and scientific metrics (Hirsch coefficient, number of references, etc.) was highlighted.

Service contracts are signed with the faculty every academic year. Currently, seven lecturers from RA and ten lecturers from abroad jointly teach in the academic program. The expert panel's study of the faculty's professional qualities showed that they fully correspond to the academic program's goals. Removal of a lecturer from the Foundation is not regulated. From the meetings held during the site visit, it was found that in case of dissatisfaction with the lecturer by the students, if the lecturer does not meet the demands of the students and shows irresponsible behaviour in work with the faculty, then the contractual relations with him are terminated. Such a case was recorded during the study, and the contract with that lecturer was not renewed.

The Foundation's management selects faculty based on professional, linguistic, organizational, and other abilities. The composition is small; it includes a head of the academic program and a laboratory assistant. According to the order signed in 2022 by the director of the center, three criteria for the selection of the staff of the PD are defined: Index of the Hirsch index of the author's evaluation in the "Scopus" system, at least the title of associate professor and the circumstance of being a leading scientist in the field. Currently, all lecturers teaching at the Foundation meet the abovementioned standards. As a regular evaluation mechanism of the selected faculty, the Foundation uses student surveys.

According to the "Student Survey Procedure" approved by the director in 2023, "anonymous surveys are carried out to find out the opinion of students about lecturers, taught professional subjects and the quality of teaching." After analyzing the results of surveys carried out every semester, the academic council has the right to propose replacing the lecturer (if his teaching level does not meet the organization's standards). Based on the needs of the faculty identified because of evaluations, the Foundation does not carry out training or improvement measures; they prefer to replace the lecturer. At the same time, lecturers are advised by the Scientific Council on improving teaching methods or subject programs.

The institute's management considers the high salary, which is several times higher than the current rates in RA universities, as well as the covering of air tickets and

accommodation expenses, a tool for ensuring the stability of the faculty. During the site visit meetings, the lecturers were assured they had arrangements for long-term participation in the program. Foreign lecturers agree with the university administration on the dates and duration of short-term teaching visits. In case of sudden rejections of lecturers, there is a personnel reserve of local and foreign lecturers ready for replacement. The personnel reserve, which the Foundation considers a guarantee of providing the program with teaching staff, is the result of the personal and scientific connections of the members of the Scientific Council. The base needs institutionalization and regulation. The Foundation does not see the need for policies and procedures to ensure the professional advancement of the faculty because, based on the specificity of the academic program, renowned and qualified personnel in the field are invited to teach.

The involvement of international and local lecturers and communication between them is an opportunity for the Foundation to share experiences. However, it became clear from the site visit meetings that face-to-face or online meetings between lecturers are not frequent, and lecturers are not informed about the programs, teaching, and evaluation approaches of others. Despite the small number of administrative and teaching staff, students and lecturers are satisfied with implementing the academic program.

The current problems of organizing administrative and educational processes are being solved promptly. Due to the small size of the institution, communication is more based on personal contacts, and students and lecturers contact each other directly or through the head of the educational department.

## **CONSIDERATIONS:**

The expert panel believes that because of the joint work of the Foundation's director, the head of the academic program, and the scientific council members, the goal of involving exclusively highly qualified faculty from AR and abroad in the educational process has become a reality. The professors involved in the academic programs are high-level specialists in the respective fields, guaranteeing they will provide high-quality education and research work. The academic program fully confirms its exclusivity, not only to the availability of unique courses from the point of view of content but also to the high professional level of the faculty.

The expert panel considers it positive that both their professional abilities and teaching experience are important during the selection of lecturers, which allows for achieving the main goals of the program and the defined educational outcomes. The expert panel considers that the faculty's professional qualities correspond to the academic program's goals.

In the absence of an approved procedure for the dismissal of the faculty, it is positive

that student surveys and meetings related to the quality of teaching are organized. They provide an opportunity to respond to current problems quickly and, if necessary, make changes in the faculty. However, the expert panel considers a need to introduce a multi-component system of regular faculty evaluation, which will allow a more objective and impartial evaluation of the lecturer's work. The expert panel finds that the mechanisms that are applied to ensure the stability of the faculty serve their purpose. In this direction, no significant problems will arise in the coming years. It is positive that a competitive salary has been set for the faculty, which makes it possible to involve experienced professionals in the teaching process. At the same time, the expert panel considers it important to involve the program graduates in the teaching process as teaching assistants, which will contribute to the stability of the faculty and make a more efficient schedule for the course. In addition, in the absence of foreign lecturers, their assistants will solve the task of conducting practical classes, assisting students in mastering the material and providing consultations.

In addition, the expert panel considers that the Foundation should take steps to increase the efficiency of the funds spent on teachers' salaries. During the short-term visits of qualified personnel, their scientific and pedagogical potential is not fully used, so mechanisms should be introduced to use their skills in another way. They can take an active part in filling the personnel base with young professionals, hiring teaching assistants, writing articles, managing internships and other processes. Although there are no mechanisms for ensuring professional advancement, partly due to the program's uniqueness and partly due to the qualifications of the invited faculty, the expert panel considers it important to diversify the forms and opportunities of communication between local and international lecturers. This will contribute to and spread the introduction of innovations in the professional field and good practice.

#### **SUMMARY:**

Considering that as a result of the application of approaches to the involvement of faculty, the leaders of the Foundation and the academic program managed to attract the best local and foreign specialists in the field, there are requirements for the professional qualities of the faculty, the mechanisms for evaluating the staff, the mechanisms used to ensure the stability of the faculty are serving to their goal, and the necessary personnel reserve has been formed for the coming years, the current problems of the organization of educational processes are solved with a small number of administrative and educational support staff, the expert panel finds that the Foundation meets the requirements of Criterion 5.

#### **CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 5 is satisfactory.

## **CRITERION VI. RESEARCH AND DEVELOPMENT**

**CRITERION:** The TLI ensures the implementation of research activity and the link of the research with teaching and learning.

**FINDINGS:**

The "My Step" charitable Foundation's strategy includes science-related goals. It states: "to support the development of the scientific community in RA using international best practices and laws, giving a key importance to the directions of the natural science and mathematics, to ensure the latter's connection with various branches of the economy." The Foundation does not have a policy developed to implement the strategy.

The faculty are post-graduate specialists invited from different institutions and directions guided by their institutions or personal interests. The research component of the Foundation and the academic program is expressed by the involvement of application specialists in the educational process in the scientific field. It became clear from the site visit that several works are being carried out to develop the scientific research sphere. Masters are included in the thematic research of lecturers, which becomes the basis of joint professor-student articles. In addition, lecturers give assignments to develop research skills, such as studies of scientific articles and drawing conclusions based on them. The Foundation has not yet developed mid - and short-term research plans.

During the meetings with the expert panel, the lecturers and the head of the academic program mentioned that they have experience conducting joint scientific research. Moreover, they try to solve problems together, but these problems are unrelated to the Foundation's activities. It was also noted that the list of literature presented to students for studying the courses includes the lecturers' research works as study material, emphasizing the latest research results.

Research activity is mainly expressed by solving problems related to the topics of students' master's thesis. This activity is carried out under the guidance of the lecturers and is included in the professional areas of the master's program. The study of the thesis papers showed that their research is fundamental and experimental.

An agreement has been reached with the Armenian-Russian (Slavic) University, Yerevan State University, and NAS Physical Research Institutes to implement laboratory



research. Students, together with local lecturers, carry out calculations that are used in thesis papers. Master's thesis papers are expected to be published as scientific articles in prestigious international journals. It became clear from the expert meetings that some of the first graduates have published articles in international and local journals. The Foundation also plans to use the laboratory capacities of the Russian "Skolkovo" quantum center, which will be in the future on the territory of the Institute of Physical Research of the National Academy of Sciences of the Republic of Armenia.

#### **CONSIDERATIONS:**

The expert panel considers it positive that the strategic plan of the "My Step" charitable Foundation emphasizes the discovery of research potential in the directions of natural science and mathematics and its development through international collaborations. At the same time, the expert panel points out the lack of a strategy of the Foundation in the field of research and a lack of any plan which would reflect the research interests and ambitions and clearly describe the goals, objectives and actions contributing to the comprehensive development of the field.

The definition of clear and measurable indicators and the implementation of planning based on them would also facilitate the development of research and scientific activity. The Foundation's emphasis on the internationalization of research activities is positive; it is ready to finance students' participation in various international conferences. During the meetings with the expert panel, the lecturers and the head of the educational program mentioned the experience of conducting joint scientific research.

Due to the expert panel concentrating the resources of existing lecturers-scientists and within the framework of common interests, it is possible to form research groups composed of local and foreign scientists to carry out work in the direction of the Foundation's strategic goals in the field of science, by actively involving masters. It is positive that the academic program is composed of a large research component, which is manifested by tasks and preparation of joint articles, which contribute to the development of research skills among students, as well as to engagement in science.

The expert panel considers the Foundation's request to publish the results of thesis papers as articles. This is important for the development of scientific research, the Foundation's reputation, and the dissemination of scientific results. The expert panel also considers it positive that the Foundation connects scientific research and the learning process. By including the lecturers' research works in the list of mandatory literature as study material, the teaching staff can provide information on the latest research results in the field. The expert panel finds that because of the activities, the graduates develop professional research skills and

are ready to participate in research independently and form new knowledge.

**SUMMARY:**

Considering that there is a goal of research activities, the lecturers and students involved in the academic program carry out joint research works; the academic program contains a research component and the tasks given to students contribute to increasing their interest in science and developing research skills, the lecturers apply the results of their research in the teaching process, the results of master's thesis are required to be published as articles in international and local scientific journals, the expert panel finds that the Foundation meets the requirements of the 6th Criterion.

**CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 6 is satisfactory.

## **CRITERION VII. INFRASTRUCTURE AND RESOURCES**

**CRITERION: The TLI has necessary resources to create learning environment and to effectively support the implementation of its stated mission and objectives.**

**FINDINGS:**

The International Scientific Educational Institution "Pan-Armenian Center for Excellence" considers improving the educational environment a continuous process to meet the academic program's requirements and modern science's developments. Currently, the Foundation does not have its own educational space, and to implement the academic program, it rents one auditorium and 1 room as a chair in the building of the Faculty of Romano-Germanic Philology of YSU.

The auditorium has a projector, appropriate equipment, and a modern blackboard; a free Wi-Fi connection is used to organise the lecture process. The rented library and laboratory are in the YSU Physics Faculty building. The library has electronic versions of the main textbooks for the courses corresponding to the curriculum. Scientific laboratories of YSU, Armenian-Russian (Slavic) University and the Institute of Physical Research of the National Academy of Sciences of the Republic of Armenia are contracted for educational, practical and research purposes.

During the site visit meetings, it was revealed that students and faculty are satisfied with the auditorium and its equipment. The Foundation did not analyse the compliance of the educational resources with the scope of the institution's qualifications, as it got its license

recently.

The Foundation plans its annual finances and discusses its budget with its Executive Director. The foundation receives no funding from the state budget and is fully financed by the "My Step" Charitable Foundation. During the meeting with the expert panel, the Deputy Director assured the panel that the "My Step" Foundation plans to continue financing the implementation of the project for another 6-7 years. The financial resources provided by the Foundation are spent according to two of the main directions of the mission of the institutions implementing academic programs: teaching and learning and service to society. Funds are not allocated to create educational laboratories equipped with modern devices for scientific research.

The Foundation sees a threat from a single funding source and plans to diversify sources. Based on the current need, the Director of the Foundation submits an appropriate report to the Executive Director of the Foundation every month to obtain the necessary financial resources and spend them according to the presented articles. The "My Step" Charitable Foundation fully ensures the financial stability of the Foundation with its investments. The Director of the Foundation approves the budget submitted by the Foundation and then submitted to the Board of Trustees of the Foundation for approval.

The expenditure items of the Foundation are as follows:

- salaries (administrative and faculty),
- air ticket and accommodation expenses of the invited teaching staff,
- Auditorium repair costs,
- costs of purchasing stationery and equipment,
- travel expenses.

The periodic reports of the Director of the TLI to the Director of the Foundation, which are mainly dedicated to providing information on actual expenses, are among the mechanisms that guarantee the purposefulness of using financial resources.

The Foundation sees no problems implementing the measures planned in the "Strategy of the International Scientific Educational Institution "Pan-Armenian Center for Excellence", considering that the provided resources are sufficient.

The mechanisms, processes, and procedures for the timely distribution of resources are clear. At the beginning of each month, the necessary funds are provided to acquire the required resources with the report of the Foundation's director. The Foundation considers it a weakness: "The initial stage does not yet allow a laboratory equipped with modern equipment."

The effectiveness of the resource base was not analyzed to ensure continuous quality improvement and stability. This is related to the fact that the needs of teachers and students

are not studied to ensure the quality of learning processes. The institution still does not have developed regulations for the management of information and documentation. All documents related to the Foundation, such as reports, budget, contracts, orders, regulations, study contracts, etc., are available through the internal information system.

Several documents related to the organization of the educational process became available on the official website of the "My Step" Charitable Foundation after applying for the Foundation's accreditation process. The Foundation rents educational and auxiliary premises in YSU, which is provided with the necessary security conditions. YSU has a security system, including a guard service, a fire alarm system, and video surveillance of the building. There are provisions for quick and safe evacuation of students in emergencies. The Foundation considers that there is no need for additional such services in the current situation. Therefore, no funds are allocated to health and safety services.

The Foundation considers the course evaluation survey one mechanism for evaluating the applicability, availability, and effectiveness of the resources provided to students and lecturers. In the self-evaluation and during the meetings with the expert panel, it was noted that the lecturers expressed their opinions about the resources in an informal way, which in turn was presented to the director of the Foundation. However, these opinions are not documented, although it is stated that "based on them, improvements are made as needed." In the self-evaluation, and not during the visit, information about the assessment results of the applicability, availability, and efficiency of the resources was provided to the expert panel.

#### **CONSIDERATIONS:**

The expert panel believes that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" is provided with the necessary basic resources to implement the "Quanta" academic program and achieve the main strategic goals, which is sufficient to create an educational environment. However, considering the pace of development of quantum physics worldwide, there is a need to constantly update and increase resources. This is particularly true of the latest technologies and laboratory base, which will contribute to the acquisition of practical abilities of students. The Foundation also sees the problem of laboratories. One of the options for the solution can be the expansion of existing cooperations and the establishment of new cooperations with local and international partners to use their laboratory bases.

Along with the laboratories, the rented library is an important part of the learning environment. The books are available in electronic versions and other educational materials provided by the faculty to meet the students' requirements for studying the main courses provided by the curriculum.

It is positive that the "My Step" Foundation plans to continue financing the project's implementation for another 6-7 years, which assured the Deputy Director of the Foundation during the meeting with the expert panel. This fact guarantees certain stability, but the expert panel considers financing from one source a danger and sees the need to diversify sources. The Foundation should take clear steps to get funding from the government or other sources, which will guarantee longer-term stability. In that case, allocating financial resources to create educational laboratories equipped with modern devices, scientific research, and health care services will be possible.

The institution still lacks developed regulations for the management of information and documentation, which does not cause problems for a small structure. It is positive that paper and electronic documentation are carried out, and electronic tools are used for information management, contributing to the transparency of the Foundation's activities.

The expert panel recommends that the educational and auxiliary spaces occupied by the Foundation be provided with a security system, including a guard service, a fire alarm system, and video surveillance of the building. The Foundation must also find financial means to organize healthcare services for employees and students.

In addition to acquiring new resources, it is important to examine the extent to which existing resources are applicable, available, and effectively used, which is a quality assurance system issue. It is still not studied what needs lecturers and students have for ensuring the quality of learning processes so that appropriate resources are provided.

#### **SUMMARY:**

Considering that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" is provided with the necessary basic resources for the implementation of the academic program and the achievement of the main strategic goals, which is sufficient to create an educational environment, the financing of the "My Step" Foundation is a guarantee of stability for the next 6-7 years of the implementation of the program, applies paper and electronic documentation, electronic tools for information management, which contributes to the transparency of the Foundation's activities, creates a safe and secure environment for students and lecturers, the expert panel finds that the Foundation meets the requirements of the 7th Criterion.

#### **CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 7 is satisfactory.

## **CRITERION VIII. SOCIETAL RESPONSIBILITY**

**CRITERION: The TLI is accountable to the government and society for the education it offers and the resources it uses as well as for the research it conducts**

### **FINDINGS:**

The Foundation's accountability is divided into internal and external parts. External accountability involves submitting annual reports to organizations that support the Foundation and the authorized body financially. According to the latter's format, a report is provided to each organization financing the Foundation's program. The internal accountability process involves reporting to the Executive Director of the Foundation. The head of educational department also prepares a report. From the study of the reports, it became clear to the expert panel that they contain factual and non-analytical data on educational processes and financial costs.

Annual reports on the Foundation's activities are included in the "My Step" report and are available to the public through the Foundation's website. The website also has a section dedicated to the master's program. Recently, a new page related to accreditation was opened on the website, where the documents regulating the institution's activities are presented. The Foundation has a Facebook page with information about the academic program. PR campaigns are organized to present the program. Interviews are conducted with students and lecturers about the effectiveness and benefits of the program, which are published on the Foundation's website.

Public feedback is organised by sending letters to the e-mail address and the website or social network pages. Feedback mechanisms with internal stakeholders include surveys and meetings. Telephone communication is also used as a feedback tool.

The Foundation organizes several events, such as summer school, an Olympiad, and a scientific conference. They aim to attract students to the master's program. Those who want to participate in the courses of the master's program are allowed to listen freely, the format of which is an additional variety of educational services.

Faculty representatives also provide counselling services for summer school participants. There are no other mechanisms for transferring knowledge and values to society.

### **CONSIDERATIONS:**

The expert panel considers the processes carried out by the Foundation to be important in developing the state. The development of the "Quanta" - "Quantum and Mesoscopic Physics" master's academic program was coordinated with state institutions and is aimed at solving

problems related to implementing the latest technologies in Armenia. The expert panel considers the periodic provision of activity-related reports as positive; at the same time, it is essential to improve the quality of reports based on analytical data, which will also substantiate the results of implementing strategic goals. The expert panel considers positively the implementation of public relations activities, PR campaigns, etc.

At the same time, the program's competitive advantages must be more comprehensively presented to the public, which will increase confidence in the program and attract applicants. It is positive that information about the Foundation and the program is available in a separate section on the website of the "My Step" charity foundation. At the same time, the expert panel considers it essential that the Foundation is presented more comprehensively on the website, contributing to disseminating information about the Foundation.

Expert studies have shown that the mechanisms for transferring knowledge and values to the public also need to be expanded, given that the program is unique, and the lecturers and graduates involved in it have a specific experience that will be useful to society.

#### **SUMMARY:**

Considering that the Foundation operates an accountability system with internal and external components, the Foundation ensures the transparency and accessibility of its procedures and processes to the public, targeted works aimed at relations with the public, PR campaigns, etc. transfer processes, the expert panel finds that the Foundation meets the requirements of CRITERION 8.

#### **CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 8 is satisfactory.

### **CRITERION IX. EXTERNAL RELATIONS AND INTERNATIONALISATION**

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

#### **FINDINGS:**

The Foundation does not have policies and procedures to encourage external relations but has many partnerships. The Foundation cooperates with the scientific and educational structures of the republic and uses the laboratory potential of these structures. Cooperation

agreements have also been signed with YSU, Armenian-Russian University, and the Institute of Physics of the National Academy of Sciences, within which students are allowed to carry out laboratory work using the technical means of the mentioned institutions. A cooperation agreement was signed with the Zangezur copper-molybdenum combine, within which 50 million drams were provided to the Foundation to attract the faculty. The Foundation also cooperates with the Ministry of High-tech Industry for job placement and internships for graduates.

There is no infrastructure or specifically responsible body for foreign relations and internationalization. In that area, the director, the head of education, and the laboratory assistant carry out certain functions. The academic program lecturers bring their international teaching and research experience to the educational process.

Knowledge of foreign languages is emphasized, as some foreign lecturers teach in a foreign language. The program's professional literature is mainly in English, and the curriculum includes a professional English course. Communication with international lecturers is maintained in English or Russian.

During the site visit meetings, graduates and students mentioned that they have different levels of mastery of foreign languages and had some difficulties during their studies. Two professional foreign language study semesters and internal discussions in student-formed groups address current language issues.

#### **CONSIDERATIONS:**

The Foundation emphasizes international cooperation and the development of foreign relations. The internationalization of educational and research components and the development of foreign relations are facilitated by the involvement of faculty with a high international rating. Developing policies and procedures that enable the establishment of external relations and the definition of a schedule of actions arising from strategic development issues and responsible parties would make it possible to regulate work in this direction more clearly. It would also contribute to developing new courses and APs meeting European standards.

An important step would also be to develop exchange and mobility programs and create opportunities for foreign students to be involved in the academic program, using the connections of international lecturers. The expert panel finds that even establishing ties with universities from which foreign lecturers are invited will significantly improve the Foundation's indicators in the field of internationalization.

The expert panel considers it positive that the Foundation has taken steps to create external partnerships, which have created opportunities for the organization of student



internships and the involvement of lecturers. At the same time, the expert panel believes that expanding cooperation with international scientific and educational institutes will promote the mobility of students from the point of view of the organization of study and practice, which lecturers and students emphasized during the meetings with the expert panel. In this regard, the expert panel sees great potential in the Foundation and considers it important to use the connections of international lecturers.

Activating relations with educational and scientific research organizations of RA, expanding the laboratory base, and activating relations with employers would be important steps toward achieving the strategic goals. It is positive that the Foundation pays a lot of attention to raising the knowledge of a foreign language (English and Russian). This is an important factor in deep mastery of foreign language courses, mobility of students and lecturers, and attraction of international students.

**SUMMARY:**

Considering that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" carries out purposeful work to create an environment conducive to the exchange of experience, development and internationalization, there is a faculty and a modern academic program that contribute to this it provides students with the necessary level of foreign language for the organization of the course and international for mobility, the expert panel finds that the institution's institutional capacity largely meets the requirements of Criterion 9.

**CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 9 is satisfactory.

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

**CRITERION: The TLI has an internal quality assurance system for promoting establishment of a quality culture and continuous improvement of all the processes of TLI.**

**FINDINGS:**

In 2023, the document "Policy of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" in the field of education quality" was developed, which was not approved by any governing body. In its policy on education quality, the Foundation has set itself the goal of "ensuring high competitiveness in the education sector, training high-

quality specialists, improving the quality and efficiency of Foundation's educational and management processes year by year." In addition to solving several problems in organizing training and providing resources, the quality assurance policy provides for implementing certain actions.

- develop and implement an effective quality management system that will ensure the systematic improvement of educational activities,
- create an evaluation system for the institution's faculty,
- highlight the educational needs of students to provide quality educational services and an effective educational environment, etc.

The institution has no developed QA procedures other than the "Student Survey Procedure". The purpose of surveys conducted in this procedure is to "identify students' attitudes towards lecturers, professional subjects taught and the quality of teaching." The Foundation has not yet developed a general approach to the structure of the quality assurance system. There is no developed Quality Assurance Manual, and the PDCA cycle of process quality management has not been implemented. According to the policy, the implementation of quality assurance processes is within the responsibilities of the institution's director, but his functions are not specified.

The agreed policy was implemented briefly, so the effectiveness of the Foundation's internal quality assurance system policies and procedures had not yet been analyzed. The participants in the expert panel meetings were largely unfamiliar with the provisions of the QA policy.

The institution has no separate structured unit or QA responsible. In parallel, the head of the educational department carries out other duties related to internal quality assurance processes. The responsibilities of the head of the educational department include submitting a weekly report to the Director of the Institute on the educational process, organizing surveys and analyzing the results. Functions related to quality assurance are not specified in any way. Based on the results of analyzes and meetings with students, the director decides or submits them to the Academic Council for discussion.

The institution does not provide separate financial resources for implementing internal quality assurance processes, but it does provide material resources for organizing surveys. Survey participation is the main mechanism for ensuring stakeholder involvement in these processes. Surveys are conducted among students only once a semester. External stakeholders are not involved in any quality assurance process. Among the forms of involvement in the quality assurance process, regular meetings of students with the director of the Foundation, the head of the educational department and the academic staff are also considered. During the

meetings with the expert panel, the students confirmed that the meetings were effective because they allowed them to raise the issues that concern them. They mentioned the solution to the problem with one lecturer, the existence of repetitions in the programs and the change of the time of the beginning of classes.

The Foundation's policy on quality education includes the action planned to "revise the policy of the Foundation on quality education as necessary, taking into account the educational needs raised by students." Currently, there is no evaluation of the impact of the quality assurance system on improving educational processes or of the effectiveness of surveys and questionnaires. It is too early to discuss a review of the quality assurance system or its components based on evaluations.

The Foundation regularly studies the successful experiments of various universities in the Republic of Armenia. It benchmarks the quality assurance system to implement improvements in its system. Necessary mechanisms have not yet been developed, and information has not been collected on the main processes provided by the quality assurance policy. The reports submitted by the head of the educational department to the director of the Foundation every week also refer to the educational process.

The Foundation's management emphasizes self-evaluation of institutional capacity, which has guided several areas of activity, including document development, process implementation, and preparation for external evaluation. The main means of receiving information for internal and external stakeholders are the website of the "My Step" charity Foundation and the Facebook platform. The website mainly presents events related to the academic program, such as information about lecturers invited from abroad, interviews conducted among students, etc. Much space is also given to present the necessary information to the applicants, such as admission procedure, schedule, subject programs, formats, etc. On the website's page, announcing the start of the accreditation process and documents ensuring the transparency of the institution's activity and educational process are available, such as statutes, rules, guidelines, etc. The academic program specification, curriculum, timetables, faculty list, etc. are available. The website also includes the Foundation's policy on the quality of education, the procedure for conducting surveys, and the questionnaire format. As for the analysis of survey results or the availability of information on the quality of any other process for the stakeholders, they are missing on the website.

From the site visit, it became clear that the faculty did not receive the relevant part of the analysis of the survey results. However, they were informed about the organization of the surveys.

## CONSIDERATIONS:

It is positive that the "Policy of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" in the field of education quality" was developed in 2023, emphasizing the processes of quality assurance. Certain directions and actions were identified. However, they have not been specified at the level of plans, even in the direction of any process. The expert panel believes that primary importance should be given to the quality assurance processes of the educational program, as well as their planning and organization.

The self-evaluation study and the information obtained during the meetings allowed the expert group to conclude that the institution is more focused on organizing educational processes and pays less attention to quality assurance issues. Based on benchmarking the quality assurance systems of organizations such as the Center of Excellence, the structure of the own quality assurance system should be developed, clarifying the participants and their responsibilities.

The Foundation provides human and material resources to implement QA processes. At the same time, the expert panel considers the fact that the head of the educational department is responsible for quality assurance a conflict of interest. In addition, the panel considers the professional development of the persons responsible for implementing QA processes to be very important, the lack of which can currently hinder the full and effective implementation of these processes.

Surveys are one of the quality assurance mechanisms used, but in the case of a small sample size, meetings and focus group discussions can be more effective. The Foundation has good experience, such as meeting students with the director, head of the educational department, and faculty, which allows them to raise problems and reach solutions. The expert panel believes that the meetings in this format should be continued, but their agendas should also be filled with the discussion of issues arising from the objectives of the quality assurance policy.

The expert panel considers that the Foundation emphasizes the self-evaluation of institutional capacity, a useful process in preparing for external evaluation. The expert panel considers that it would be useful for the Foundation to carry out a self-evaluation or report every year or every two years according to accreditation criteria and standards, forming in advance the list and sources of information needed for external evaluation, collecting, and analyzing it.

It is positive that stakeholders have access to several documents on the official website of the "My Step" charitable foundation regulating internal processes and supporting applicants and students, which contributes to ensuring transparency. However, analyses of survey results and information on the quality of the academic program and other processes are missing,

resulting from the incomplete implementation of the QA system. The approach of not providing the faculty members with the analysis of survey results also needs to be reviewed. Shouldn't they improve their performance based on those evaluations?

**SUMMARY:**

Considering that the International Scientific Educational Institution "Pan-Armenian Center for Excellence" does not have an approved QA system from the point of view of improving the educational program, there is no QA action plan and procedures, the PDCA cycle of quality management is not applied, it does not provide separate human and financial resources for QA process management, the employees included in the QA processes do not have the appropriate abilities, the necessary data is not collected for the processes and external evaluations separated by the QA policy, the results of the analyzes are not available to internal and external stakeholders, the impact assessment of the quality assurance processes on the improvement of education is not carried out, the expert panel considers that The Foundation does not meet the requirements of Criterion 10.

**CONCLUSION:**

The compliance of the institutional capacities of the International Scientific Educational Institution "Pan-Armenian Center for Excellence" Under "My Step" Charity Foundation to the requirements of CRITERION 10 is unsatisfactory.

## EVALUATION ACCORDING TO ACCREDITATION CRITERIA

CRITERION	CONCLUSION
<i>I. Mission and Purposes</i>	<b>Satisfactory</b>
<i>II. Governance and Administration</i>	<b>Unsatisfactory</b>
<i>III. Academic Programmes</i>	<b>Satisfactory</b>
<i>IV. Students</i>	<b>Satisfactory</b>
<i>V. Faculty and Staff</i>	<b>Satisfactory</b>
<i>VI. Research and Development</i>	<b>Satisfactory</b>
<i>VII. Infrastructure and Resources</i>	<b>Satisfactory</b>
<i>VIII. Societal Responsibility</i>	<b>Satisfactory</b>
<i>IX. External Relations and Internationalization</i>	<b>Satisfactory</b>
<i>X. Internal Quality Assurance System</i>	<b>Unsatisfactory</b>

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**Anushavan Makaryan**

**Chair of Expert Panel**

**29.05.2024**

## APPENDICES

### APPENDIX 1. CVS OF EXPERT PANEL MEMBERS

**Anushavan Makaryan** - in 2001, he earned his PhD in Physical and Mathematical Sciences, in 2006, he became an Associate Professor. In 1978-1983, he studied at the Faculty of Physics of Yerevan State University, in 1983-1986 he was a post-graduate student of the Institute of Radiophysics and Electronics of the National Academy of Sciences of the Republic of Armenia. In 1986-1988, he worked as a junior researcher at the Institute of Radiophysics and Electronics of the RA Academy of Sciences. Since 1988, he has worked in the Department of Optics of the Faculty of Physics of YSU. In 2011-2013, he worked as the head of the "Internal Quality Assurance Policy and Procedures" project at the National Center for Professional Education Quality Assurance, and in 2013-2019, he was the head of the Institutional and Program Expertise Department. Since 2011, he is a certified expert panel member of Professional Education Quality Assurance in the RA. 2016-2019 was a certified international expert in the education of the State Accreditation Agency of the Russian Federation "Rosakkredagenstvo", since 2019 he is the acting director of YSU Ijevan branch.

**Aram Saharyan** - In 1987 he received the scientific degree of candidate of physical-mathematical sciences, in 2001 he received the PHD of physical-mathematical sciences. From 1977 to 1982, he studied at the Faculty of Physics of Yerevan State University. From 1982 to 1986 he was a graduate student of YSU Physics Faculty, from 1992 to 1996 he was an assistant professor, and from 1996 to 2008 he was an associate professor. From 2003 to 2009, he was a regular employee of the Abdus Salam International Center for Theoretical Physics. From 2016-2018 Head of the Science Policy Department of the RA State Science Committee. From 1987 until now, he has been a senior researcher at the Institute of Applied Physics of the National Academy of Sciences of the Republic of Armenia. From 2009 until now, he is a professor of the YSU Physics Faculty. From 2017 until now, he is the head of the theoretical physics department at YSU Institute of Physics. From 2018 until now, he is the head of the theoretical physics laboratory of the YSU Institute of Physics. He is the author of more than 300 scientific articles.

**Alexander Gusev** - In 1999, he graduated from the Faculty of Physics and Mathematics of Belgorod State University. In 2004, he received the scientific degree of candidate of physical-mathematical sciences; in 2020, he received the Doctor of Sciences in physics and mathematics. From 1999-2004, he was a junior researcher at the Information Technology Laboratory named after MG Mesheryakov; from 2005-2009, he was a researcher; from 2010-2021, he was a senior researcher. Since 2019, he has been a professor at Dubna State University. Since 2021, he has been a leading researcher at the Information Technology Laboratory named after MG

Mesheryakov. The results of scientific activities were published in more than 120 articles.

**Maxim Vinichenko** - In 2009 graduated from the Department of Physics of Semiconductors and Nanoelectronics of Saint Petersburg Polytechnic University, named after Peter the Great. In 2012, he was a graduate student at the same university's Department of Physics of Semiconductors and Nanoelectronics. In 2013, he received the scientific degree of Doctor of Physics in semiconductor physics. From 2009 to 2015, he was an associate professor at the Department of Physics of Semiconductors and Nanoelectronics of Saint Petersburg Polytechnic University, named after Peter the Great. From 2014 to 2020, he was a senior researcher at the Department of Physics of Semiconductors and Nanoelectronics of Saint Petersburg Polytechnic University, named after Peter the Great. 2013 - 2018 Senior Lecturer of the Physics Department of Semiconductors and Nanoelectronics of Saint Petersburg Polytechnic University, named after Peter the Great. From 2017 to 2020, he was the same university's executive secretary of the admission committee. From 2018 - until now, he is a lecturer at the Higher School of Engineering Physics of the Institute of Electronics and Telecommunications of Saint Petersburg Polytechnic University named after Peter the Great. From 2020 - to date, he is the head of the "Technical Physics" master's and bachelor's degree program at the Saint Petersburg Polytechnic University named after Peter the Great.

**Inna Melkonyan**- A 1st-year student of the Department of Bioengineering and Bioinformatics of the Armenian-Russian (Slavic) University, a student member of the expert panel. In 2024, she participated in the training course for student experts of the " Student's Voice" project.



## APPENDIX 2. SCHEDULE OF SITE VISIT

	<b>03.04.2024</b>	<b><i>Start</i></b>	<b><i>End</i></b>	<b><i>Duration</i></b>
1	Meeting with the management staff of "MY STEP" charitable foundation	09:30	10:15	45 min.
2	Meeting with the director of the International Scientific Educational Institution "Pan-Armenian Center for Excellence"	10:25	11:25	60 min.
3	Meeting with the person responsible for education	11:35	12:35	60 min.
4	Meeting with representatives of the Scientific Council	12:40	13:20	40 min.
5	Break, expert panel discussions	13:30	14:30	60 min.
6	Resource observation	14:40	16:00	80 min.
7	Document review and closed meetings of the expert panel	16:15	18:15	120 min.

	<b>04.04.2024</b>	<b><i>Start</i></b>	<b><i>End</i></b>	<b><i>Duration</i></b>
1	Meeting with Scientific Director of "Quanta" Quantum and Mesoscopic Physics AP	09:30	10:30	60 min.
2	Meeting with faculty representatives (10-12 people)	10:40	11:40	60 min.
3	Meeting with students (10-12 people)	11:50	12:50	60 min.
4	Break, expert panel discussions	13:00	14:00	60 min.
5	Meeting with heads of departments/centres (HR, Head of Operations).	14:10	15:20	70 min.
6	Meeting with alumni (10-12 people)	09:30	10:30	60 min.
7	Meeting with employers	10:40	11:40	60 min.
8	Document review and closed meetings of the expert panel	11:50	12:50	60 min.
	<b>05.04.2024</b>	<b><i>Start</i></b>	<b><i>End</i></b>	<b><i>Duration</i></b>
1	Meeting with the Quality Assurance responsible	09:30	10:20	50 min.
2	Open Meeting	10:30	11:10	40 min.
3	Meeting with the member(s) selected by the expert panel	11:20	12:20	60 min.
4	Break, expert panel discussions	12:30	13:30	60 min.
5	Closed meeting of the expert panel	13:40	17:20	220 min.
6	Meeting with the management staff, a summary of the visit	17:30	18:00	30 min.

### APPENDIX 3. LIST OF DOCUMENTS OBSERVED

N	Name of the document	Criterion
1.	A program or plan for any level of Foundation development. SP	1
2.	Annual work reports	1
3.	An example of the annual cost estimate /for the center, if available/	2
4.	Example of a director's report on financial expenses	2
5.	Forming procedure of the Scientific Council	2
6.	Summary reports of the work done at the end of the planning phase	2
7.	Theses examples	3
8.	Certification Commissioner's Report	3
9.	Examples of teaching materials	3
10.	Analysis of surveys of teaching methods	3
11.	Thesis preparation schedules and the basis for performance control	3
12.	Assessment sheet	3
13.	Drafts of reviews	3
14.	Student assessment schedule	3
15.	Order on the formation of the admission committee	4
16.	Tests, topics, and assignments for entrance exams	4
17.	Analyzes of student surveys	4
18.	A sample employment contract or order form	5
19.	Survey results about faculty	5
20.	Checklist	5
21.	Passports of the position	5
22.	Results of surveys on satisfaction with resources	7
23.	An example of a financial allocation report	7
24.	Examples of reports	8

#### APPENDIX 4. RESOURCES OBSERVED

- Laboratory of quantum materials and nanophotonic,
- Educational laboratory of optics and atomic physics,
- Laboratory of photonics and artificial intelligence.

#### APPENDIX 5. ORGANIZATIONAL STRUCTURE OF THE EDUCATION INSTITUTION

*Հավելված 4*

ԿԱՌՈՒՑՎԱԾՔ  
«ԳԵՐԱԶԱՆՑՈՒԹՅԱՆ ՀԱՄԱՀԱՅՎԱԿԱՆ ԿԵՆՏՐՈՆ» ՄԻՋԱԶԳԱՅԻՆ ԳԻՏԱԿՐԹԱԿԱՆ ՀԻՄՆԱԴՐԿԻ



## APPENDIX 6. LIST OF ABBREVIATIONS

- AP- Academic programme
- QA - Quality assurance
- NQF - National Qualifications Framework
- NQF - Sectoral Framework of Qualifications
- SP- Strategic plan