NATIONAL CENTRE FOR PROFESSIONAL EDUCATION QUALITY ASSURANCE FOUNDATION

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National Center For Professional
Education Quality Assurance
Foundation

EXPERT PANEL REPORT

ON INSTITUTIONAL ACCREDITATION OF NKR SHUSHI UNIVERSITY OF TECHNOLOGY

Yerevan– 2020

INTRODUCTION

The institutional accreditation of the NKR Shushi University of Technology was carried out based on the application presented by the University. The process of institutional accreditation was organized and coordinated by the National Centre for Professional Education Quality Assurance, Foundation (hereinafter ANQA).

Whilst carrying out its operations, ANQA was guided by the regulation on "State Accreditation of RA Institutions and their Educational Programs" set by the RA Government on 30 June, 2011 N978 decree as well as by N959-Ն (30 June, 2011) decree on approving RA Standards for Professional Education Accreditation.

The expertise was carried out by the expert panel formed according to the demands of ANQA Regulation on the Formation of the Expert Panel. The expert panel[1] consisted of 4 local experts and 1 international expert from Poland.

Institutional accreditation aims not only to carry out the external evaluation of quality assurance but also to ensure the continuous improvement of the institution's management and quality of educational programs. Hence, there were two important issues for local and European expert panel members:

1) To carry out an expertise of institutional capacities in line with the RA standards for state accreditation.

2) To carry out an evaluation from the perspective of the institution's capacity to be integrated to the European Higher Education Area (EHEA) and to comply with international advancement.

The report refers to the expertise of institutional capacities of ShUT according to the state criteria and standards for accreditation as well as to the peer review from the perspective of integration into the EHEA.

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[1]Appendix 1CVs of Expert Panel Members:

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The expertise on the institutional capacities of the NKR Shushi University of Technology (hereinafter ShUT, University or HEI) was carried out by the expert panel formed according to the requirements of ANQA Regulation on the Formation of the Expert Panel. The evaluation was carried out in accordance with the 10 criteria of institutional accreditation approved by the RA Government decree N959, dated June 30, 2011. The university is undergoing an accreditation process for the first time.

ShUT is guided by 2016-2021 strategic plan (SP), which has been approved by the University Board of Trustees. According to the SP, the mission of ShUT is "to prepare speacialists with practical capacities meeting the demands of NKR labour market in the fields of information and communication technologies, agriculture, architecture and engineering, by implementing vocational and higher education academic programs and involving students in practices and applied researches, as well as providing public with professional advice".

The aims of the SP of ShUT focus on assurance of quality education, implementation of researches and innovations, stimulation of foreign affairs and internationalization, ensurance of university infrastructure aligned with academic programs, as well as provision of stable and varied financial flow into the university and boost of their management effectiveness.

In order to reveal the needs of internal and external stakeholders of ShUT, the following mechanisms are applied: implementation of surveys, organization of meetings, examination of opinions. Participation of internal and external stakeholders is guaranteed in governing bodies of the university, where they express their needs, make suggestions, take part in discussing various issues and making decisions concerning them.

The majority of ShUT employers are presented in the academic staff (AS) as concurrent employees, which makes it difficult to clearly define them as external stakeholders and reveal their actual needs.

Internal stakeholders had the opportunity to express their attitude towards the aims and objectives of the HEI, although only few of them took part in the development or discussion of the SP. According to the expert panel, the passive involvement of internal and external stakeholders in developing, evaluating and reviewing the SP can lead to similar passivity on the part of some stakeholders in implementing the SP and not sharing the responsibility of the HEI in implementing its mission and aims.

As the term of implementing the SP of ShUT is not over, final evaluation of the works done has not been implemented yet. In order to control and evaluate the progress of implementing SP, the key indicators of ShUT activity are collected, where "Admission and Number of Students" "Educational Process", "Resources and Management", "Infrastructures", "Science and Innovation", "External Relations and Internationalization" are focused on.

Being a small university, ShUT is guided by the structural model typical of big HEIs, although it has recently implemented some organizational and structural changes. The governance body coordinating educational and scientific functions of the university is the Scientific Council; there are also Rectorate and Faculty Councils. The existence of Committee on Quality Management, Anti-corruption Committee, Ethics Committee and Student Scientific Society is also important.

Although there are mid-term and short term plannings in the university and provision of reports from various departments and key indicators of activity assessment are the main monitoring mechanisms, mostly there are no evaluation and improvement stages in the university.The mechanisms for further use of information collected with the aim of assessment are not clear, which reduces the objectivity of process result assessment and opportunities for further improvement.

ShUT values development and implementation of academic programs "aligned with modern demands of labour market of Artsakh". The university carries out academic programs of vocational and higher educational (bachelor's and master's) specialties. Outcome-based academic programs have been developed as a result of benchmarking of similar academic programs from different HEIs of RA. In order to obtain expected learning outcomes for the study programs, appropriate approaches and methods of teaching and learning are defined; however, ShUT does not have policy for selecting teaching and learning methods yet. The master's academic programs include few elective courses. The expert panel values the experience of ShUT in conducting group graduation papers (master's theses) and the practice of MA students' compulsory participation in scientific conferences and publication of reports.

There are student recruitment and admission mechanisms in ShUT, which provide for stable number of students; however, an evaluation of efficiency of the aforementioned mechanisms is not carried out. There is no policy for recruitment and admission of foreign students, which would foster internationalization of the institution, as well as increase financial inflow.

Officially the students of ShUT are included in the Board of Trustees, the Scientific Council, Rectorate, Committee on Quality Management and Faculty Councils. Their intersts are also presented by Students Council and Students Scientific Society. However, on the other hand, the involvement of students in governing system has not been analysed and evaluated. Besides, the above-mentioned bodies do not include students of correspondence department. Surveys are one of the mechanisms revealing students' needs; however, as the expert meetings have shown, students mainly are not aware of the results of surveys.

Although there is a Career Center in ShUT, which also gathers information about students, there are no analyses concerning the efficiency of connection with employers, satisfaction of graduates and employers, evaluation of efficiency of organizing internships, as well as students' occupation, which would prove the productivity of the above-mentioned body. Besides, the expert site visit revealed that most students are not aware of the activity of the aforementioned organization. Small part of students makes use of the services provided by this organization, and there is no study on what part is satisfied with the services of the center. Feedback mechanisms with MA graduates need to be improved.

The processes of guidance and support to learners by the administrative staff is coordinated in ShUT, the students are satisfied with the availability and support of administrative staff.

The number of academic staff in ShUT is 213, 131 of whom are main employees and internal secondary job holders, 67 are external secondary job holders, and 15 are hourly paid employees. 18% of the AS holds scientific degree. The HEI conducts a policy of youth emplyment, as a result of which the average age of lecturers amounts to 47: Lecturers are employed both on invitation and by competition order. Short term contract employees prevail. The number of categories of academic staff is high and amounts to 13, and for each category the University sets particular requirements. The workload of lecturers in ShUT is quite high and can be more than 1000 hours yearly, some of the main academic staff has 10-13 courses in their academic workload. Conducting diverse and numerous courses and supervising great number of graduation papers (master's theses) cannot foster quality education.

The main evaluation mechanisms of academic staff are various surveys and class observations; however, their results mainly are not taken into consideration in measures aimed at the improvement of lecturers. It is praiseworthy that the governance system of ShUT conduct policy of youth employment. However, parallelly the number of people holding scientific degrees has also decreased, which can strictly endanger implementation of scholarly activities in the building.

The main tool of stabilizing provision with academic staff is comparatively higher salary than the average in the republic. The freshman lecturers are not offered courses for development of

teaching, researching and linguistic capacities. That void is attempted to be filled by the mentorship of senior lecturers.

The SP of the university focused on research and innovation, although the research directions are not specified. The human and material resources of research field are not evaluated in the university. Although there is a document of "long-term, mid-term and short-term programs", it lacks work plan and connection with research directions. There are no responsible people and terms for the implementation of the program, data on resources, and expected results.

It is praiseworthy that the university conducts some research activity, particularly the Laboratory of Natural Technologies. Probably the research activity here has perspective and can further contribute to inflow of finances. ShUT has things to do within the scope of internationalization of research papers, as to this day it has not conducted any internationally significant research activity.

There are no mechanisms for close interconnection of research activity and educational process in the university. Having Students' Scientific Society (SSS) is praiseworthy, although ShUT still has things to do in linking the research and educational processes, involving students and organizing research procedures.

ShUT values quality infrastructure, auditorium and laboratory conditions in its strategic plan, although at the moment the resource base required for the implementation of several academic programs in the university is still weak. There are no appropriate stands, simulators, testers, methodical provision and modern literature for the implementation of practical and laboratory works of those academic programs. ShUT does not ensure mechanisms for evaluataing applicability, availability and efficiency of the resources provided to internal stakeholders.

The presence of laboratories of water issues and drip irrigation in partnership with Institute of Water Problems, as well as agricultural training lands, newly built cattle and poultry farms of Sarushen training-industrial base and "Pedigree station" of Khnapat is very commendable. However, it is also necessary to closely link the activity of those bodies to learning process and to create proper conditions for quality implementation of educational process in place.

The accountability in ShUT is conducted by bottom-up principle, up to the Rector, Scientific Council, then Board of Trustees, all of which encompass various spheres of the university and are regular in essence. The work of all departments is summed up in different reports. However, the lack of quality analyses in some reports cannot properly foster the further improvement of the University's activity.

Taking into account the fact that the whole information concerning the activity, regulations, procedures, news and announcements is published both in the University's official website and several social media platforms, it can be considered that the procedures and processes in the University are transparent and accessible for public. Besides, the University is trying to make its activity public by means of different media outlets, newspapers, publications and exhibitions, which foster the transparency of the main processes of ShUT. Although ShUT values stimulation and expansion of foreign affairs and internationalization, considering it one of the main strategic directions of the HEI, from the institutional perspective the university lacks internationalization aspect. It is not clear in what terms ShUT intends to ensure the growth of internationalization indicators. Although the university has a trilingual website, it does not properly present the provided educational services, opportunities for exchange programs, which limits the prospects of developing internationalization. There are no academic programs in foreign languages. It is necessary to drastically improve the level of knowledge in foreign languages among faculty and academic staff, as well as students, with the aim of introduction of foreign-language academic programs, activation of internationalization, and mobility. The mobility indicators of students and lecturers are alarming. Students are not informed about exchange programs, opportunities of taking part in them and their selection criteria. Analysis on cooperation with partnering organizations is not conducted, which

hinders internationalization of academic programs and scientific-research activity. There is no interraltion between internationalization process and the educational one. On the other hand, this state of internationalization is conditioned by the political and economic isolation of the Republic of Artsakh. The expert panel finds it important that ShUT is planning to analyze the experience of internationalization of educational institutions in unrecognized states, which can be valuable for Armenia, as well as can develop a strategy aimed at establishing connections with HEIs in unrecognized states.

ShUT in the first aim of its SP focues on introduction of internal quality assurance system.Quality assurance system as such is in formation stage in ShUT. Although ShuT has developed internal quality assurance policy, mechanisms and procedures of its implementation are strictly limited, i.e. the principles of internal quality assurance have not yet turned int ospecific processes. It is also alarming, that QA department is not provided with human, material and technical resources for the implementation of its functions. QA department does not analyze the collected data, does not ensure active participation of internal and external stakeholders in the quality assurance processes.

The expert panel also thinks that the absence of analyses on various processes conducted by ShUT QA, as well as evaluations and reports on their implementation efficiency does not ensure transparency of information on quality of ShUT processes for internal and external stakeholders.

The PIEI cycle in ShUT is mainly planning, and the processes have not yet entered the stages of implementation, evaluation and improvement, which jeopardizes the development stability of Armenia.

Strenghts of the Institution

1. Mission and academic programs aimed at meeting the demands of labor market of the state,
2. governing system typical of universities established during short period of time,
3. the existence of code of rules on integrity, academic honesty and ethics in Shushi University of Technology,
4. the experience of collaborative master's theses by groups of students dedicated to applied issues,
5. involvement of employer-lecturers with practical capacities in the educational process,
6. application of the "institute" of mentorship of young lecturers with the aim of ensuring stability of teaching staff,
7. The positive experience of lecturer-student collaborative projects and organization of trial production with the aim of solving regional problems,
8. Existence of quality assurance policy and procedures and established body of quality assurance.

Weaknesses of the Institution

1. Passive involvement of external and internal stakeholders in the implementation of University mission and SP objectives,
2. absence of clear mechanisms of reviewing the strategic plan,
3. implerfection of analyses of reports of governing bodies and evaluation mechanisms,
4. lack of involvement of correspondence department students in University governance, evaluation of activity and quality assurance.
5. absence of monitoring policy and procedures for governance processes and clear mechanisms for their organization,
6. multicontet courses taught by AS and supervision of great number of graduation papers (master's theses),
7. small number of AS having scientific degree,
8. weak provision or lack of resources corresponding to the objectives of academic programs,
9. absence of evaluation system for accountability,

10. imperfection of mechanisms for transmitting knowledge or values to the public and absence of additional education,
11. low rate of participation of academic staff and students in exchange and grant programs,
12. absence of academic programs and courses taught in foreign languages, as well as absence of students from European partner universities studying in the University within the framework of exchange programs. օտար լեզվով ՄԿԾ-ների, դասրթացների բացակայությունը,
13. no harmony between financial planning and strategic objectives,
14. absence of decentralizaed network of quality assurance in the University, absence of cooperation between the department of quality assurance of professional education, chairs and structural deparments,
15. provision with limited human resources of QAD, absence of tools for evaluating efficiency of its activity,
16. absence of PIEI cycle in different processes carried out in ShUT.

Main Recommendations
Mission and Purposes
1) To increase involvement of external and internal stakeholders in the development of SP, evaluation of achievemnts and reviewing processes,
2) To set indicators of progress evaluation, which will give an opportunity to evaluate the achievability of strategic objectives.

Governance and Administration
3) To ensure active participation of stakeholders in decision-making processes,
4) To ensure effective reflection of external and internal stakeholders' needs,
5) To conduct evaluation of the organizational structure of the University, with the aim of boosting productivity of the activity of departmen
6) To develop indicators for evaluating productivity of activity of departments.

Academic Programs
7) To ensure more active involvement of external stakeholders of ShUT not only in the development of academic programs and formation of their outcomes, but also in monitoring and regular review of syllabi.
8) To implement a clear policy of distribution of teaching workload, taking into consideration both peculiarities of the specialty, and student-center approach.
9) To increase the portion of elective ocurses in all academic programs.
10) To develop a standard benchmarking procedure and use it in their own academic programs.
11) To clarify grading criteria of graduation papers and theses.

Students
12) To develop and introduce effective mechanisms for recruitment and admission of foreign students.
13) To develop evaluation indicators for the activity of Career Center, aimed at examination of labor market needs and satisfaction of graduates and employers, examinations on degree of ocuption of graduates and ensuring stable feedback from them,
14) To increase students' involvement in research projects by means of clear rewarding mechanisms,

Faculty and Staff
15) To improve and regularize actions aimed at improvement of professional qualities and teaching methodology of academic staff.
16) To include professional requirements presented to lecturers in the academic program packages.
17) To review the policy of compiling lecturers' workloads, excluding the variety of courses taught.
18) To clarify the evaluation system of AS, to increase the number of lecturers' trainings based on their needs revealed, and to expand their geography,

19) To take measures aimed at recruiting specialists in the academic staff with research capacities.
20) To implement evaluation and optimization of administrative and academic-supporting staff.

Research and Development

21) To clarify ambitions and priorities of research sphere, to implement research activity planning,
22) To develop mechanisms and provide resources aimed at activating involvement of teaching staff in international research programs and conferences and stimulating research activity,
23) To develop research laboratory base and trial production, serving them to the aims of educational programs,
24) To deepen research cooperation with industrial and business partners,
25) To introduce tools for the improvement of students' research skills, to ensure students' active participation in the activity of scientific-research laboratories.

Infrastructure and Resources

26) To implement diversification strategy of financial inflow, using the positivie experience of lecturer-student collaborative projects and organized trial production, implemented for the region,
27) To implement distribution of financial means according to SP priorities and objectives of academic programs,
28) To implement evaluation of applicability, availability and efficiency of the resources provided to students and teachers,
29) To ensure movement of stakeholders with special needs through all the buildings,
30) To improve technical and material resources of educational and educational-scientific laboratories, to view Yerevan representation as an opportunity to create a center for field research,
31) To introduce an electronic system for document circulation.

Societal Responsibility

32) To set a requirement of conducting quality analyses for all the reports drafted in ShUT,
33) To extend and improve foreign language content in the official website of the University,
34) To diversify mechanisms for transmitting knowledge to society,
35) To develop feedback mechanisms with society.

External Relations and Internationalization

36) To develop mechanisms for implementing internationalization policy with appropriate quality and quantity indcators, schedule and plan of work,
37) To draft foreign language variants of existing academic program packages for integrating foreign students,
38) To develop mechanisms stimulating stakeholders' participation in internationalization processes (international grant programs, exchange programs),
39) To develop mechanisms for improving the knowledge of academic staff in foreign languages,
40) To boost efficiency of the activity of external relations department.

Internal Quality Assurance System

41) To conduct trainings for QA staff members and other employees of the university with the aim of ensuring continuity of quality assurance processes,
42) To draft and publish a manual on quality assurance system,
43) To develop a review policy for the internal quality assurance system,
44) To ensure productive cooperation of QA department with other university departments,
45) To organize the activity of QA department by PIEI cycle, passing from planning to practical implementation, evaluation and further improvement of developed policies and frameworks,
46) To introcude mechanisms and procedures ensuring active participation of external and internal stakeholders in quality assurance processes.

PEER-REVIEW FROM THE PERSPECTIVE OF EDUCATION INSTITUTION'S INTEGRATION INTO EUROPEAN HIGHER EDUCATION AREA

Observations

It is difficult to evaluate the achievements of ShUT from the perspective of its integration with EHEA as the Republic is not internationally recognised. That is why the University does not participate in initiatives open to European HEIs, such as Erasmus+. It does not take part, either, in research projects developed as part of ERA. Moreover, the University is small and very young, therefore, its potential to cooperate with foreign partners is smaller than that of well-established and large universities. In most cases, the implementation of new solutions has started only this year. For these reasons, there is a considerable gap between declared solutions and their implementations. Also, their knowledge in the academic community demonstrated during meetings with the review team was not high.

Vision, Mission and Strategy

The Mission and Strategic Plan for 2016-2021 as well as certain policies, for example Quality Assurance Policy, have been formally adopted. The goals and tasks contained in the medium term Strategic Plan are broken down into three-year and annual Action Plans with their relevant KPIs. Their implementation is monitored and their aggregated results are presented in the Rector's reports and posted on ShUT's website. The Strategic Plan was prepared with the participation of both external and internal stakeholders.

However, there is no long-term development vision among those documents where the University's ambitions would be presented as well as the place it wishes to occupy on the domestic and international education markets in the future. Perhaps ShUT should be more responsive to the needs of the industry of the Republic and the region and - as there is not academic potential to develop theoretical research - change its profile to that of a university of applied sciences. The fact that there is no University development plan containing identified risks and spanning over a period of more than 5 years is a significant weakness in this area. Certain reservations could be voiced as to excessive generalisation in formulating tasks in the five-year strategic plan as not always are they explicitly measurable, there is no mention of implementation time limits and no persons bearing responsibility. Examples can be the following statements: "*to implement any activity not restricted by law*", "*to organize admission and relevant education*". The University has no methodology of assessing the implementation of its five-year plans.

University Governance

ShUT is a micro-university but it copies organisational structures characteristic of large HEIs. Governance is hierarchical and multilevelled and involves the Board of Trustees, Rector, three faculties, 8 chairs and 8 laboratories. Collective academic bodies, such as the Scientific Council, Rectorate Council and faculty councils operate at University and faculty level. There exist functional commissions like Quality Management Committee, Anticorruption Committee, Ethics Committee etc. It is worth emphasising that key stakeholders participate in their work. The Board of Trustees is dominated by ShUT representatives and - which is surprising in the context of a technical university - there are basically no representatives of industry and business. No typical platforms of cooperation with industry (for instance academic incubators, technological parks) have been developed. The University's administration involves a dozen or so units, among them Quality Assurance Department. As not all of those units have their own statutes and job descriptions, it is difficult to see the extent to which their activity is autonomous and whether or not certain tasks are duplicated. It is possible to indicate the duplication of certain tasks as well as the unclear distribution of responsibility between them. For example, there is an Educational Methodological Department, but QAD deals a.o. with exam organization, ECTS implementation, designing timetable for BA students and even the issuing of diplomas. It should be noted with satisfaction that academic integrity is ensured by the Code of Ethics, anti-corruption regulations and supporting structure. The Student Council is the only bodies protecting student rights, as no independent student right ombudsman has been appointed.

The organisational structure has been modified lately which is why its functionality and effectiveness has not been analysed yet. That kind of analysis is to be undertaken in the future. All stakeholders expressed satisfaction from the existing system of organization and management. More transparent mechanism for financial resources allocation between faculties, chairs and other University units and strategic goals (research, internationalization, quality assurance) should be developed. Many of them do not have their own budget. One of the basic weaknesses concerning decision making boils down to insufficient comprehensiveness and regularity in administering surveys to stakeholders which are treated as the main source of collecting information about the needs of the education and labour markets. Part-time students do not participate in the surveys and only 9 questionnaires were sent to the employers. There is no system of information reliability assessment. Therefore, decisions are made on the basis of fragmented information.

Academic Programs

ShUT offers education at four levels from 6 to 8. Its study programs define learning outcomes consistent with ANQF descriptors. They are formally linked to teaching and assessment methods. So far no analysis of the effectiveness of those links has been performed. The University is implementing ECTS and uses domestic and international benchmarking when designing its programs. Generally, many European HEIs develop interdisciplinary programs when faced with quick changes to the structure of qualification demand. ShUT does not offer such solutions. Student achievements procedures have been developed. It is a commendable thing that external examiners sit on final examination boards.

APs are monitored and undergo short-term evaluation. The weaknesses of surveys mentioned before are the reason why stakeholder feedback is not regular. In this situation it is also difficult to formulate accurate improvement suggestions. So far no research into the labor market has been does which would use sources other than employers' opinion of graduates. Nevertheless, it seems that in this area the PDCA cycle is relatively well developed.

Students and student-centred learning

Student participation in university governance is formally guaranteed. Students appoint their representatives to collective academic bodies, including the Board of Trustees, Scientific Council and the Rector's Council. Their interests are also represented by the Student Council and Student Scientific Society. It is, however, difficult to see their actual impact on the University's life as their participation in governance is not analyzed. SAR observes that there are no part-time students who would be members of the above bodies. When talking to ANQA experts, students did not confirm good level of knowledge about activities their own representatives who in management bodies.

The University confirms the implementation of student-centered learning. In practice, however, the choice of individualized learning pathways is hindered by legal restrictions, a small number of elective courses (1-2 in some programs), conducting many classes by one lecturer (in extreme cases 9 and 12 or supervising many MA theses by one mentor. There is no evidence that the University diversifies teaching methods depending on the level of student preparation. Students and teachers do not have access to individual student survey results, so a dialogue between them on teaching and learning processes is limited. Traditional teaching methods, such as lectures, continue to be very frequent. When meeting the review team, students and teachers were able to indicate what the move towards student-centered learning involved, but only to a small extent. This is indicative of the need to define and promulgate ShUT's own SCL policy taking account of the existing solutions in the teaching and learning area.

Teaching staff

ShUT has not developed a clear human resources policy. Teaching staff recruitment happens by invitation or through open competitions. Short-term employment contracts dominate among teachers employed by ShUT and the percentage of part-time workers is growing which is not the best way to develop human potential in the long run. No qualification requirements have been formulated

for teachers and individual areas of study. From the perspective of European universities, the dominance of annual employment contracts, high teaching loading (over 1000 hours per year) is noteworthy, and the long list of job levels (up to 13) for academic staff is surprising. One of the most important challenges is the need to rejuvenate the staff and increase the number of holders of academic degrees.

Short-term teacher evaluation system has been developed. Students' opinion expressed in questionnaires and annual teacher reports are the main source. The peer review in the form of class observations has been introduced since October 2019. Teachers applying for further degrees are not given any deadlines by which to reach them. Higher remuneration than average pay in the Republic is the main tool intended to stabilise human resources. Activities supporting teaching staff's didactic and academic development are not developed to a sufficient degree and the needs of teachers in this area are not looked into. No training courses raising their teaching, research and linguistic competences are offered. Note that teachers interested in training should formally request their organization. Newly employed teachers can count only on senior lecturers' informal mentoring. Currently only 18% of teachers employed at ShUT have scientific degrees and 12 of 231 employees are professors.

Research

ShUT carries out research resulting in scientific publications and patents (over 20). However, it is not reflected in the University's long-term plans. Although it is possible to find a reference to research in the Strategic Plan, it is so general that it is impossible to pinpoint the University's research priorities and the objectives it wishes to achieve. No R&D policy has been developed and no procedures, either. This area of activity is planned to be included in IQA but no methodology of quality assessment has been prepared. There are no research groups which - in the case of a small HEI - would improve the chances for grants and research effectiveness. Research internationalisation is announced as one of the priorities but ShUT does not participate in international research projects. SAR states that no article in Web of Science journals has been published. Research cooperation with the industry and business partners has been quoted, however particular initiative is not linked to the Strategic Plan or action plans of the chairs. No research commission has been appointed and the human resources policy contains no incentives (besides the necessity to obtain higher scientific degrees) to develop R&D. Student participation in research is small. Despite the development of cooperation with national partners, no platforms were created to promote the commercialization of research results.

External relations and internationalization

ShUT's ambitions concerning internationalisation are resented in the five-year plan but no internationalisation policy has been developed. No corresponding document clarifying the University's principles relating to cooperation with domestic partners has been adopted. However, it should be appreciated that despite political limitations affecting the development of internationalisation, some attempts of cooperation with foreign HEIs are being made. This mainly includes students' and employees' presentations at international conferences and occasional inviting foreign guests to hold one-off lectures. Recently ShUT became a member of International Association of Construction Universities. Also, the External Relation and International Cooperation Department has been established recently. It is worth noting that in discussions with the review team, a great majority of stakeholders were in favour of a more dynamic policy of developing international cooperation.

ShUT plans at the beginning to establish closer cooperation with unrecognised republics. The development of internationalisation at home would be quite a chance, however, this form is hindered by legal obstacles e.g. related to issuing visas to foreign students or requiring prior consent from the Minister - for ShUT's students to participate in courses provided in foreign languages. From this perspective there is a need to enhance curricula with global, intercultural values. Only a very small percentage of students and teaching staff say they can speak English and so far University does not

provide courses in foreign languages. Also it should be mentioned unattractive research and teaching infrastructure, for instance library does not subscribe any international bibliographical database. The reasons why the University has made insufficient progress in this area should be analysed.

Internal Quality Assurance System

It is the University's ambition to build a comprehensive quality management system encompassing all areas of ShUT's activity and contributing to continuous process improvement. At the current stage no such system has been developed, although there are some procedures in place which mainly refer to study programs and the education process. On the basis of available documentation, the above intentions and the objectives of its development as well as compliance with ESG '15 should attract positive ratings. The implementation of QAP is supported by QMC and the newly established QAD, the latter being the Rector's subordinate. The composition of QMC includes students and external stakeholders. Interviews held during the site visit show that quality assurance issues and awareness of the University's IQA are not rooted to a sufficient degree at the moment which is a major challenge in terms of building ShUT's quality culture. Another challenge faced by IQA effectiveness consists in the irregularity and incompleteness of mechanisms of reflection on a number of processes and their outcomes, as well as the weak links that exist between solutions being implemented and the University's strategy. Policy and procedure on modification of IQA system need to be developed as well as Quality Handbook should be prepared. Most of the processes are in the planning and initial implementation phase, while the lack of analytical foundations makes it difficult to formulate relevant and comprehensive improvement proposals. Therefore, the quality loop has not been closed yet in any area of activity.

Final observations

It is obvious to an external observer that ShUT is in a transitional period and that due to the above-mentioned conditions the gap between the declared intentions and actual achievements is visible. Undoubtedly, many achievements can be noted, however despite the all efforts made there is still substantial gap between European universities and ShUT. Reducing these gaps depends - apart from external barriers - on three key factors:

- the determination of university leaders in achieving strategic goals,
- the engagement of the university community in realization of strategic plans which requires ongoing dialogue,
- and the ability to develop mechanisms for reflection and sound analysis of processes and their outcomes.

GeghamKaroyan
Head of Expert Panel

STAFF OF EXPERT PANEL

The external evaluation of NKR Shushi University of Technology was carried out by the following members of expert panel (see APPENDIX 1 for CV-s of experts):

- **Gegham Karoyan** – vice-director in educational affairs in NPUA Institute of Information and Telecomunnication Technologies and Electronics, associate professor in the chair of "Electronic technologies", PhD in technical sciences,

- **Miecheslav Sokha** – professor in University of Warsaw and National school of public administration, doctor in economics, member of financial committee in European Consortium for Accreditation in Higher Education (ECA),

- **Tsaghik Hovhannisyan** – scientific secretary in NPUA Institute of Information and Telecomunnication Technologies and Electronics, PhD in technical sciences, associate professor,

- **Hasmik Minasyan** – head of Quality Assurance Center of Artsakh state university, associate professor in the Chair of Biology, PhD in biology,

- **Alla Avagyan** – 2nd year student in the specialty of Bread, Confectionery and Macaroni Production Technology in National Agrarian University of Armenia.

The staff of expert panel was agreed upon with the educational institution.

The works of expert panel were coordinated by Anushavan Makaryan.

Translation was done by Mariam Karapetyan.

All the members of expert panel including the translator and the coordinator have signed impartiality and confidentiality agreements.

PROCESS OF THE EXTERNAL REVIEW

Application for State Accreditation

The NKR Shushi University of Technologies applied to ANQA for institutional accreditation by filling in the application form (18.01.2020) and submitting license and copies of appendixes. The ANQA Secretariat checked the data presented in the application form, attached documents and the ANQA electronic questionnaire completed by the institution. After making the decision on accepting the application request (29.01.2019) a bipartite agreement was signed. The timetable of activities was prepared and approved.

Within the deadline set in the schedule, the institution presented the Armenian and English versions of its self-evaluation report according to the form set by ANQA, as well as the package of attached documents.

The self-evaluation was carried out by a team formed specifically by the order of the University rector.

Preparatory Phase

ANQA coordinator observed the report with the aim of revealing its correspondence to the technical requirements of ANQA.

Then ANQA secretariat sent the self-evaluation report to the expert panel, the members of which were agreed upon with the educational institution and were approved by order of the director of ANQA.

Five trainings on the following topics were organized for the expert panel members with the aim of preparing the latter and ensuring the effectiveness of the activities:

1. RA Accreditation Regulation, Criteria and Standards,
2. Main functions of expert panel,
3. Preliminary evaluation as preparatory phase of developing expert panel report, the main requirements for writing the report,
4. Methodology of observation of documents and resources,

5. Techniques and ethics of conducting meetings and questions to be posed.

Having observed the self-evaluation and attached documents of ShUT, the expert panel conducted the initial evaluation according to the format, preparing the list of additional documents needed for observation, as well as the list of issues and questions for corresponding departments or target groups.

Within the scheduled time the expert panel summarized the results of the initial evaluation and formed a plan-schedule of the site-visit. According to the ANQA manual on "Conducting Expertise" the intended meetings with all the target groups, close and open meetings, observation of documents, visits to departments of the institution, etc. were included in the schedule.

Self-Evaluation of Shushi University of Technology

According to the form set by ANQA, the university presented self-evaluation of institutional capacities on 15.07.2019 in English and Armenian, as well as the package of attached documents. The self-evaluation report mainly contained general and descriptive information, most documents presented as bases were not approved, although they contained information on approval terms and approving body or person, qualitative data and its analysis were little.

Preliminary Visit

Taking into consideration the distance of the institution, the preliminary visit was replaced with Skype meeting with the HEI contact person two weeks before the visit of head of the expert panel and process coordinator. The plan-schedule of the site visit, as well as list of additional documents needed for observation were presented, mutually agreed upon decisions were made and discussions conducted on organizational, technical and informative questions related to the site visit, as well as behvior of participants of the meetings and ethical norms. Requirements for rooms intended for focus group discussions and work of expert panel were desvribed, issues on their furnishing and equiping were clarified.

Site Visit

Site visit was carried out between November 11 and 14, 2019. The works of expert panel commenced by a close meeting one day before the site visit, the aim of which was to discuss the expert evaluation framework, issues subject to observation during site visit, strengths and weaknesses of the PEI based on criteria, procedure of focus group meetings, clarify further steps and come to an agreement on all this with international expert.

The whole expert panel, ANQA coordinator and translator were present during the site visit.

The site visit began and ended by meetings with the university rector. The lecturer and student participants of focus group meetings for clarification of questions, as well as faculty deans and heads of chairs, employers and graduates were chosen randomly from the list given beforehand. All the meetings intended by the schedule were conducted, except for the open meetings, for which nobody signed up. During the site visit expert panel implemented examination of documents, observation of resources and focus group meetings in different university departments.

Information gained during different meetings, as well as main results of document examination and observations were summarized at the end of each day and during the final meeting organized at the end of site visit. The expert panel discussed main results and came to an agreement first on separate accreditation standards, then on meeting the requirements of criteria. Final conclusions on meeting the requirements of criteria were reached by all the members of the panel by means of open discussion, using the consensus principle.

Expert evaluation was implemented within the framework of State Criteria and Standards of Accreditation and ANQA procedures. The assessment has two levels- **unsatisfactory** and **satisfactory.**

Expert Panel Report

The expert panel prepared preliminary variant of the report based on self-evaluation presented by the university, as well as examination of attached documents and observations of the site visit, as a result of regularly organized discussions. Based on observations after discussions the head of the panel and

ANQA coordinator prepared preliminary variant of the expert panel report, which had been agreed upon with experts. The international expert prepared a separate peer review. The document has been translated and given to the head of expert panel. The responsibility of including the expert's review and approaches in the report was given to the head of panel and coordinator. The peer review has been holistically included in the report text.

Anushavan Makaryan
The coordinator's signature

History. Shushi university of technology was founded on 28 December, 2015 by the decision of NKR Government. It is the only technological institution in the region, which produces personnel in the technical, technological, agricultural, architectural and construction spheres, which are required by the developing economy of Artsakh.

Education

- **Academic Programs-** The mission of the University is to train specialists with practical skills in accordance with the requirements of the labor market of the Artsakh Republic in the fields of information and communication technologies, agriculture, architecture, construction, implementing vocational and higher educational programs, involving students in practical work.
- **Academic Staff-** By the 2016-2021 strategic plan, Shushi University of Technology has set an objective to have an academic staff recruitment and qualification program aimed at introduction of staffing, evaluation and improvement standards and processes, development of pedagogical-psychological skills of young lecturers, and formation of an environment that promotes self-development of lecturers.:
- **Teaching-Learning-** ShUT aims to implement education with academic programs that provide learning outcomes in line with its mission, using the theoretical knowledge of graduates entering the labor market, and especially practical skills and capacities, to implement learning by appropriate teaching and learning methods providing output results, to be guided by output-oriented assessment methods, to preserve objective and transparent assessment mechanisms for students, and to take students to European educational environment ensuring their mobility.
- **Educational Environment-** In its strategic plan, Shushi University of Technology "considers the creation of a student-centered environment as a value and considers student satisfaction with the educational environment and their educational achievements as a priority". One of the key issues of the strategic plan is to increase the level of student satisfaction with the education received at the University. /ShUT SP, aim 1/:

Research. Since its foundation, Shushi Technological University has been aiming to call the formula "From Seed to Final Product" in parallel with theoretical knowledge. There were problems in the implementation of the adopted policy, which were solved by the professional chairs. The latter organize the research work according to strategic plans, express them in the work plans, which are regulated by the activity of the chairs.

Internationalization. The aim of the "External Relations և Internationalization" field of university's strategic program is set. "To promote external relations and internationalization", the implementation of which has two objectives: "To develop և implement a policy, contributing to internationalization" and "to internationalize research activities".

Quality Assurance. The quality of education is one of the values of ShUT, when the formation and development of the internal culture of quality assurance aimed at the fulfillment of the mission are focused on. One of the key objectives of the strategic plan is to introduce and improve the internal quality assurance system in accordance with the state accreditation standards. /ShUT SP, Objective 1.4 of Aim 1/:

The University is guided by its policy in the field of internal quality assurance, which aims to increase the quality of academic and research work at the University, as well as services provided to society, the effectiveness of management processes, adapting them to the needs of internal and external stakeholders.

In conducting the evaluation, the expert panel was guided by the principle of "compliance with the goals"; the above-mentioned information was considered as the main goals and objectives of TLI.

I. MISSION AND PURPOSES

CRITERION: The TLI's policy and practices are in accordance with its mission, which is in line with the Armenian National Qualifications Framework.

FINDINGS

1.1. The institution has a clear, well-articulated mission that represents the institution's purposes and goals and is in accordance with the ANQF.

NKR Shushi University of Technology is guided by 2016-2021 Strategic plan (hereinafter referred to as SP), which was approved at the July 29, 2016 session of ShUT Board of Trustees.

According to the SP, the mission of ShUT is "to train specialists with practical skills in accordance with the requirements of the labor market of the Artsakh Republic in the fields of information and communication technologies, agriculture, architecture, construction, implementing vocational and higher educational programs, involving students in practical work, applied research and providing professional advice to the public".

According to the goals developed for the 6 areas of the ShUT SP, the provision of quality education, implementation of research և innovation, external relations և promotion of internationalization, provision of relevant university infrastructure for educational programs, as well as sustainable and diversified financial flows into the University and boosting their management efficiency are focused on.

Shushi University of Technology offers vocational and higher educational (bachelor's and master's) programs in accordance with the 5th, 6th, 7th levels of the National Qualifications Framework.

At the same time, analyses on the outcomes of the academic programs and their compliance with the NQF were carried out.

1.2 Mission, aims and objectives of the institution reflect the needs of internal and external stakeholders.

In its self-analysis report, the NKR ShUT considers students, academic staff (AS), and administrative staff as internal stakeholders, and external stakeholders are parents, graduates, and employers.

There are the following mechanisms for identifying the needs of internal and external stakeholders in ShUT: conducting surveys, organizing meetings, observing opinions. In particular, employers are surveyed about graduates, graduates are surveyed about their satisfaction with the education they received, lecturers are also surveyed to identify their needs, etc.

The participation of internal and external stakeholders is ensured in the governing bodies of the University (Board of Trustees, Scientific Council, Faculty Councils), where they express their needs, submit proposals, participate in the discussion of various issues, and decision-making process. The strategic plan was presented and approved at the extended session of the Scientific Council, and posted on the University website.

According to the objective 1.1 of the University SP (to develop and implement academic programs in line with the modern requirements of the labor market), the organization follows the requirements of the region, and in order to ensure its implementation, carries out clarification of academic programs and specialties, introduction of new specialties.

The internal and external stakeholders participating in the meetings during the site visit were partially aware of the SP of ShUT, the mission and purpose of the university. They mentioned that the activities, goals և objectives of the university mainly reflect their needs.

1.3 The institution has approved mechanisms and procedures to evaluate the achievement of its mission and purpose and to further improve them.

The main mechanisms for evaluating the results of the mission and goals of the NKR ShUT are the rector's report prepared on the basis of the reports of separate subdivisions and key evaluation indicators.

Since 2016, in order to monitor and evaluate the progress of the implementation of the SP, the key indicators of the evaluation of the performance of ShUT have been collected, in which the following

areas are focused on: "Admission and Number of Students", "Academic Process", "Resources and Management", "Infrastructures", "Science and Innovation", "External Relations and Internationalization".

Except for 2016-2021 plan-schedule of SP implementation, ShUT has also developed a mid-term 2016-2019 plan of SP implementation.

The planning of the University is carried out from top to bottom; first, the SP of the University development and the implementation plan of the latter are compiled, then based on it, the SPs or work plans of separate subdivisions are prepared.

The accountability of the university is carried out from bottom up. In particular, the lecturers submit term ս annual reports, on the basis of which the heads of the chairs submit reports to the faculty councils ս gradually to higher levels. Reports of individual subdivisions are summarized in the annual report of the Rector, which is presented to the Scientific Council, then discussed at the meeting of the Board of Trustees and published on the website of ShUT.

Given that ShUT SP is still under implementation phase, a final evaluation of the work done has not yet been carried out.

CONSIDERATIONS: The expert panel considers it positive that NKR ShUT has a well-articulated mission, which reflects the demands of the region and the main activity of the university. It is also positive that there is a SP implementation plan-schedule and SP implementation mid-term plan, as well as key evaluation indicators being applied. However, ShUT has not yet assessed the effectiveness of achieving the objectives of the SP. The analyses of the expert panel showed that the main processes carried out in ShUT correspond to the goals and objectives set in the SP.

Most of ShUT employers are secondarily employed as teachers in the academic staff, which prevents them from being clearly delineated as external stakeholders and revealing their real needs. Internal stakeholders had the opportunity to express their views on the goals and objectives of the university, but a small number of them participated in the development or discussion of the SP. The expert panel finds that the passive involvement of external and internal stakeholders in the development, evaluation and review of the SP can lead to the same passivity of the stakeholders in the implementation of the SP, not sharing the responsibility of the university for the implementation of the main goals of the mission.

The expert panel believes that the reports need to be improved in terms of analytical content, problem identification and improvements, as well as focusing on suggestions.

SUMMARY: Taking into consideration the fact that the main activity of NKR ShUT corresponds to the mission, the internal and external stakeholders accept that the goals and objectives of the university express their needs, mechanisms for evaluating the implementation of the mission and purpose are introduced, the expert panel concludes that ShUT complies the requirements of Criterion

CONCLUSION: The correspondence of NKR ShUT institutional capacities to the requirements of CRITERION 1 is **satisfactory**.

II. GOVERNANCE AND ADMINISTRATION

CRITERION: The institution's system of governance, administrative structures and their activities are efficient and are aimed at the accomplishment of mission and goals of the institution preserving ethical norms of governance.

FINDINGS

2.1. The Institution's system of governance ensures structured decision-making process, in accordance with defined ethical rules and has efficient provision of human, material and financial resources to accomplish its educational and other purposes.

ShUT's governance system is based on multilevel organisational structures characteristic of other universities. The University Chart posted on ShUT's website shows its structure and bodies. The key bodies of the University include the Board of Trustees as the managing body, Rector as the executive

body and the Scientific Council together with the Rector's Council and faculty councils as collegial bodies. On the basis of documentation made available to the review team it can be said that those bodies meet regularly and perform tasks specified in ShUT's statutes. However, the information obtained at the meeting with BoT members shows that they mainly discuss university finance issues and, to a lesser extent, the effectiveness of organizational and management structures. No vice-rectors are included in the organisational chart and statutes of the University, although they appear as members of the above bodies. On the last day of the visit, the review team received an unsigned and undated document entitled "Job responsibilities of the University staff". According to it first vice rector represents Rector and is responsible for coordination of all units work, vice rector for production activities oversees laboratories, another one is responsible for educational processes and academic programs, and deputy vice rector deals with students affairs including graduates issues. It seems that in such a small university, their number is too large. The review team was informed by the rector that in the future the number of vice-rectors will be reduced to one and the university administration will be significantly reduced. However, the university stakeholders, including BoT members, were rather silent to discuss whether the academic structures, and present institutional governance were conducive to achieving strategic goals.

Three faculties managed by deans, faculty councils as well as 8 institutes and 8 laboratories at faculty level are the Rector's subordinates. The responsibilities of the above bodies are defined in the University's statutes. This structure is complemented by a dozen or so university administration units serving and supporting the processes of education, research and international cooperation, etc. They also include units such as the Educational-Methodological Department, Quality Assurance Department, External Relations, Student Affairs and Career Centre, and the Research and Scientific-Educational Centre. Yerevan is the home of an office representing ShUT's interests. Some of them were established very recently and do not have annual action plans. Their relations and cooperation rules have not been regulated. There are job descriptions provided for most positions (including vice rectors and unit heads). Each unit presents an annual activity report to increase the supervision and effectiveness of governance. Apart from such annual report, teachers at some chairs are under the obligation to submit monthly reports.

This structure is complemented by various academic function-specific commissions, for example the Quality Management Committee, Ethics Committee, Commission for the Prevention of Corruption Risks, and by student organisations such as the Student Council and the Student Scientific Council whose representatives are members of the University's management bodies. Decisions taken should respect academic values. Academic integrity is to be guaranteed by the Code of Ethics adopted this year. An anti-corruption action plan has also been adopted.

According SAR ShUT has sufficient human and financial resources to implement its current tasks. The University uses a document entitled "Procedures and policies of the university to provide the sustainability of teaching staff" which provides a description of measures aimed at the recruitment and retention of qualified academic staff. A radical, over fivefold growth in income for this period stands out. However, budgetary subsidies from the state still account for as much as 90% of income.

2.2. The Institution's system of governance gives an opportunity to students and the teaching staff to take part in decision making procedures.

According to the statutes, students and teachers are to constitute 25% each of the composition of the Board of Trustees, Scientific Council and the faculty councils. The information published on the University's website shows that the 20-strong BoT includes 5 students and the same number sits on the 26-strong Scientific Council, as well as 2 students in the 15-strong Rector's Council. On the basis of the documentation that is posted on the website it is obvious that the parities are correct. The Head of the Student Council is a member or both the Scientific Council and the Rectorate Council. Moreover, students participate in the work of academic purpose-specific commissions, for example

Quality Management Committee. Apart from students' formal participation in governance they may directly influence decisions made by ShUT's bodies by taking part in meetings with heads of chairs and deans and expressing their opinion about the quality of teaching staff competence in questionnaires. Lecturers may make observations concerning draft decisions and present them to the Scientific Council which are then sent to chairs. Final decisions are communicated to the academic community on the University's website.

So far, the effectiveness of student participation in governance has not been looked into. SAR mentions that is it mainly representatives of full-time students that are represented in academic bodies. A survey collecting opinion about informing students about the work of their representatives in University governance bodies and actual participation in governance has only just been announced. The information about the extent to which employees use the opportunity to forward their own proposals of improvement is missing.

2.3. The Institution formulates and carries out short-term, mid-term and long term planning consistent with its mission and goals as well as has appropriate mechanisms for the implementation and monitoring of those plans.

The University operates a five-year strategic development plan covering the period between 2016-2021 which has been revised three times, most recently in 2019. This is the starting point for the development of a mid-term plan covering a period of three years. The goals and tasks of the plan are broken down into the annual plans of the University and its units. The mechanism of breaking down five-year plans is not regulated. No long-term development plans are developed, even for such areas as infrastructure and facilities. The 2018-2020 Anti-corruption plan is worth mentioning.

There is a system evaluating annual tasks in the form of reports submitted by individual units. On their basis the Rector's annual plans are evaluated. The degree of implementation of KPIs included in three-year plans is also evaluated and serves as the basis for five-year-plan amendments. There is no methodology and evaluation procedure applicable to the evaluation of five-year-plan implementation.

2.4. The Institution carried out examination of facts affecting its activities and draws on reliable findings during the decision-making process.

The identification of the needs of the education and labour markets as well as those of University stakeholders as a basis of decision making has not been systemically solved and structured. Data gathered in the process of survey administration is the main source of identifying stakeholders' needs. Such surveys are mainly administered to students, teaching staff and - to some extent - to employees. However, the survey process has quite significant shortcomings - see point 2.6. SAR provides no information on how the needs of other academic community groups are recognised, for example those of researchers, administrative and technical workers and graduates. Apart from employers' opinion of graduates no other analysing of the needs of the local or national labour market is conducted. The same goes for regular analysingfocussing on changes to the education market. Certain information about candidates' needs is drawn from meetings with secondary school students. The opinion of external stakeholders participating in academic bodies may be another source of information.

2.5. The management of the policies and the processes is based on the quality management principle (plan-do-check-act /PDCA/).

The quality assurance policy was defined and adopted earlier this year. ShUT has an ambitious plan to build a comprehensive quality assurance system which is to cover all areas of the University's activity. All policies and processes are to be implemented in accordance with the PDCA cycle. The construction of this system has only just started, some processes have been identified and certain procedures have been developed. They mainly refer to study programs and their implementation. Some intentions have not entered the planning stage yet and almost all of them have not reached the Act phase, thus closing the quality loop. Even where there is some degree of monitoring, for example

study programs, the Check and Act phases are loosely connected, which is also the case for Act and Plan. As already mentioned, the absence of well-developed analyses and scant information is a significant weakness of the phase of planning and improving processes and procedures. SAR is an example of difficulties in sound self-assessment. Our interviews with various groups, including QMC and QAD employees allow us to think that the integration of solutions in Chapter 1 of ESG'15 with similar ones mentioned in TQM remains a big challenge.

2.6. The Institution has evaluation mechanisms in place ensuring data collection, analyses and application of the data on the effectiveness of the academic programs and other processes.

Data concerning student achievement and surveys administered to students and employees are the main formalised source of information about the education process. However, this latter source of information has a few principal weaknesses. SAR and evidence collected during the site visit show that surveys are not regular, and their outcomes are not discussed with students and teachers or employers. Students, teachers and employers are only shown aggregated results posted on the University's website Almost all data quoted in SAR show that the degree of student satisfaction does not follow a normal distribution and that it reaches the upper bound of satisfaction. The issues of reliability of information coming from questionnaires is not analysed. Employers have limited opportunity to express their opinion on program issues or teaching, as only 9 questionnaires were sent. Class observation was not used as a source of information about the quality of teaching and learning processes. It has started on 1st October 2019.

2.7. There are objective mechanisms in place evaluating the quality of quantitative and qualitative information on the academic programs and qualification awarded.

The University posts on its website all basic information about its programs and their structure, student recruitment principles, assessment of their achievements and about the diploma awarding process. Part of that information can be found on three foreign language versions of the website (English, French and Russian). A department for publication and information has been established to implement the information policy. However, no such policy has been developed so far. The effectiveness of informing stakeholders about programs has not been analysed so far.

CONSIDERATIONS: The current university governance structure ensures that the implementation of strategic plans is effective to a certain extent. A number of processes have been regulated and structures supporting education processes, quality assurance and internationalisation have been developed. The vertical flow of information and relationships between individual governance levels do not give rise to major doubts. The role and scope of responsibility has been defined. Therefore, the foundations of the system of checks and balances have been laid. The review team welcomes the University's recent and visible effort to improve its organisational structure. The participation of stakeholders in decision making at various levels has been ensured. The participation of employers in the work of QMC deserves to be underlined. It is also possible to put forward grassroots suggestions of changes to the governance system. The intention to build a comprehensive university governance system consistent with the Deming cycle and supporting the future process of quality culture development is a very commendable thing. The development and implementation of regulations aimed at academic integrity and promoting ethical conduct among the academic community is something to be proud of.

The University governance system is evolving and it should be finalized in its revised statue. The most recent changes of this nature were introduced in 2019, therefore, no evaluation of its operation has been conducted. No methodology of such evaluations has been prepared. In the review team opinion more attention should be given to the following issues requiring reflection and further improvement. First, the composition of Board of Trustees seems doubtful, as it includes politicians, central government representatives, but - which is highly surprising in the case of a university of technology - no industry and business representatives. Second, it is the role of vice-rectors that remains vague in light of documentation and explanations offered to the review team. The review of

job responsibilities of vice rectors shows that none deals directly with research, quality assurance and internationalization issues. Placement of laboratories in faculties is not convincing, since they are supervised by the vice-rector but not deans. Third, there is presently a considerable overlap in responsibilities due to the rather many changes introduced in a short period of time. For instance it is difficult to find substantive justification for the division of tasks between certain departments. For example, QAD employees, in addition to QA issues, deal with ECTS implementation, designing timetables for BA students, and even printing diplomas. It would seem that Educational-Methodological Department should perform these tasks, while among the duties of the head of this department is quality of education and educational processes. Fourth, entrusting the issues of internationalisation, student affairs and graduates' careers to one department employing only two persons makes the effective performance of those tasks almost impossible and may cause the marginalisation of internationalisation matters. Also, the Rectorate is supposed to ensure organisational support provided to QMC, although it would seem that a closer link between the work of QMC and QAD would be a better option. Therefore, it is necessary to develop statutes for all University units to separate their fields of operation and revise job descriptions applicable to those employed there. The interviews we held show the awareness of activities taking place in other organisational units is rather low and submitted documents were not fully supported by the discussions. This means that it is necessary to improve horizontal communication and the circulation of information. Closer horizontal cooperation would be conducive to building participative culture and collegiate climat. It is necessary to analyse the active participation of students and other stakeholders in academic bodies and the feedback mechanisms.

Also, we strongly encourage the University management to develop organisational structures conducive to the synergy of its efforts and the development of interdisciplinary education and research. So far cooperation between chairs is barely developed. It would be advisable to establish a university research centre coordinating activities of all researchers according long-term plans. The Advisory Board including foreign partners which would determine strategic research development objectives is needed. The effectiveness of cooperation between industries and business would benefit from its formalisation, for example by establishing a technology park, academic business incubator, etc.

The methodology of planning requires radical improvement. An evaluation of the current planning system could be the starting point. In its current form, the five-year plan is a collection of more or less generalised statements, starting from minor matters, for example the organisation of Open Days, "organization of daily life of the dormitory students", and ending with those very generalised ("to organize admission and relevant education", "to implement any activity not restricted by law"). They are so universal that they do not reflect the specificity of the period they refer to, and objective-related provisions contained in the five-year plan are a significant difficulty in the construction of three-year plans. Therefore, the real process of planning is in three- and one-year periods. This loose connection between ShUT's three- and five-ear plans is a significant weakness of the planning system as a strategic management tool. The second weakness consists in the absence of plans going beyond five-year periods, and of attempts to define key risks. The third weakness boils down to the absence of a methodology evaluating objectives specified in the five-year strategic plan. This is a difficult task as quite a number of those objectives cannot be easily measured.

The shortcomings mentioned earlier and concerning collecting reliable information as a basis for decision making are a weak link in university governance. The system of administering surveys to stakeholders, analysing other sources of information about the needs of the education and labour markets as well the strengthening of analytical resources for decision making require more attention. Being focussed on student surveys means that the University's external circumstances in which it operates may be underestimated in the process of decision making. ShUT has not yet developed all procedures governing the circulation of information inside the institution and the rules of accessing

it. Even student record books are in paper form. Integrating all sources and types of information about study programs, teaching and learning and other processes into one uniform system would improve effectiveness of decision making. Using online tools for collecting and processing information would raise the standard of analyses and reduce decision making costs. External stakeholders are informed about study programs but so far there has been no analysis of effectiveness of the information policy.

In respect of human resources, a relatively low percentage of full-time employees (about 61%), and of scientific degree holders (18%) as well as a small number of professors (12 per 231 employees) are quite striking. The planned changes in the university system of governing and quality management will have considerable impact on the University's funding. Low income source diversification means that the University is too dependent on the condition of the state budget which may lead to smaller subsidies during any economic crisis. The rules of funds allocation between university units and strategic objectives should be clear. Now units do not have their own budgets.

Designing a holistic university quality management system and obtaining approval of the academic community will be quite challenging. The current status quo shows that the quality loop has not been closed in any area of activity which is why the improvement and enhancement of management quality faces quite a risk. This is due to the absence of appropriate methodologies, especially in terms of the monitoring and evaluating existing solutions. The current quality assurance system is not yet sufficiently rooted in strategic plans. As a small higher education institution, by way of dialogue, decision making transparency and the observance of the University's values ShUT should take advantage of small-scale benefits and develop an atmosphere of trust and stakeholder cooperation and reduce formal solutions costs to a minimum. Perhaps it would be advisable to consider the introduction of internal audits monitoring and evaluating progress made in the process of constructing a modern organisational structure and an internal management system.

SUMMARY: In light of the above, it has to be said that the current organisational structure and governance system provide basic frameworks for the University's operations and the implementation of its strategic objectives. The review team welcomes the University's efforts to improve the effectiveness of university governance as well as the quality of its procedures and processes. The weaknesses in this area previously discussed mainly stem from the short period of ShUT's operation.

CONCLUSION: The correspondence of NKR ShUT institutional capacities to the requirements of CRITERION 2 is **satisfactory**.

III. ADACEMIC PROGRAMS

CRITERION: The academic programs are in accordance with the Institution's mission, form part of institutional planning and promote mobility and internationalization.

FINDINGS

3.1 The academic programs are in line with Institution's mission, they correspond to the state academic standards and are thoroughly described according to the intended learning outcomes of the qualification awarded.

The first objective of the first goal (Quality Education) in NKR ShuT 2016-2021 Strategic Plan refers to academic programs. Objective 1.1 especially states: "To develop and implement academic programs in line with the current requirements of the Artsakh labor market." To accomplish this objective, the university focuses on establishing an "institute" for the head of the bachelor's educational program, creating and reviewing a package of normative documents defining the content and structure of bachelor's academic programs, ensuring compliance of learning outcomes of academic programs with the NQF, implementation of benchmarking, development and improvement of order of organizing educational process, development and implementation of an internship improvement program, development of additional educational and consulting services.

Shushi University of Technology offers vocational and higher (bachelor's and master's) educational programs in accordance with the 5th, 6th and 7th levels of the National Qualifications Framework. Currently, ShUT implements 15 BA academic programs full time, 7 programs in the correspondence system, 14 MA full time programs, and 8 correpondence MA academic programs.

Aligning the outcomes of academic programs witj the NQF was carried out by ShUT by means of aligning the outcomes of academic programs of different universities of the Republic of Armenia, which is also described in the self-evaluation report of the university. The specifications of the ShUT academic programs lack the mappings of compatability with the NQF outcomes.

According to the objective 1.1 of the university SP (to develop and implement academic programs in accordance with the modern requirements of the labor market), the university follows the requirements of the region and in order to ensure its implementation, it clarifies academic programs and specialties, including new ones (for example, the inclusion of the specialty "Food Technology").

The meetings with the expert panel revealed that the external stakeholders are partially aware of the ShUT SP, but they noted that the ShUT academi programs mainly reflect their needs.

3.2 The Institution has a policy that promotes alignment between teaching and learning approaches and the intended learning outcomes of academic programs, which ensures student- centered learning.

Although ShUT does not yet have a policy on the choice of teaching and learning methods, there are approaches to selecting them that are aimed at achieving the learning outcomes. In order to obtain the expected learning outcomes of the academic programs, their appropriate teaching ս learning approaches and methods are defined.

The teaching methods used by the lecturers are studied at the university and the content of the courses, the professional-methodological needs of the teachers are identified, attempts are made to improve them, in particular class observations are implemented, which support the exchange of professional-methodological experience among teachers and promote the best teaching experience by means of mentorship "institute".

Student semester surveys on the quality and effectiveness of teaching, surveys on "Graduate Satisfaction with University Education", results of external stakeholders' opinion polls on university graduates are considered as mechanisms for the effectiveness of teaching and learning methods.

3.3 The Institution has policy on students' assessment according to the learning outcomes and promotes academic integrity

A number of regulations have been developed at ShUT to ensure student assessment policies. They are: the assessment regulation for checking students' knowledge at the university via tests and exams, the evaluation policy and procedure for academic programs, the regulation for defining the list of indicators for assessing the quality of education, and so on. The University has developed a regulation for academic integrity, which defines the concepts of academic honesty and dishonesty, manifestations of dishonesty, the regulation for their prevention and taking responsibility. Responsibilities and competencies of internal stakeholders are clarified.

During the review of the documents submitted by ShUT, it was noted that the assessment methods in accordance with the expected learning outcomes were developed in the academic programs. Meanwhile, university chairs carried out a simple combination of the methods described in the equivalent academic programs of other universities.

There are no clear evaluation criteria in the corresponding regulations of defense of graduation papers and master's theses. Despite several regulations developed by the university, effective methods of combating plagiarism and mechanisms to ensure a sufficient level of academic integrity are still not effectively used.

The university has an appraisal system for grades, and during meetings with students of all groups (undergraduate, graduate, full-time, part-time) their awareness of the system was noted.

The University conducts group and individual consultations with students, during which they get acquainted with the assessment procedure and the changes that have taken place in it. The University has developed a "Student Guide" which also contains the information the student needs about the assessment system.

3.4 The academic programs of the Institution are contextually coherent with other relevant programs and promote mobility of students and staff, and internationalization.

The NKR ShUT builds on the advanced experience of leading universities in Armenia and abroad in terms of continuous improvement of the quality of education. In particular, during the introduction of the academic programs of the ShUT, the chairs carried out comparative analyses of academic programs of different universities of Armenia (National Polytechnic University of Armenia, National Agrarian University of Armenia, Ijan Branch of Yerevan State University) and Russian Federation (Moscow Automobile and Road Construction State Technical University, Moscow Technological University). In particular, the structures of academic programs, the distribution of credits among the educational units in the programs, the goals and objectives of the program, the competencies developed, the future career opportunities of the graduates, the syllabus, etc. were studied, compared and aligned as possible, which testifies to the content reliability of the university academic programs. Through such comparisons, the university has tried to carry out analyses, which are in fact benchmarking attempts. Through this, the university will probably create the necessary initial conditions for further mobility of students and teachers, which in turn will contribute to the internationalization of the university. However, on the other hand, it should be noted that there are few elective courses in the academic programems of ShUT.

3.5 The Institution adopts policies ensuring academic program monitoring, evaluation of effectiveness and enhancement.

Until the 2018-2019 academic year, ShUT has implemented education in various specialties through the syllabi included in the curricula, which have been developed by the relevant chairs of the university. Moreover, the involvement of students and external stakeholders (graduates և employers) in this process is weak. Even though the university has set an objective in its strategic plan to "establish an" institute "for the head of the bachelor's educational program for the proper development and implementation of programs" (SP, point 1.1.1), it has not been implemented yet.

In 2019, a policy and procedure of assessing quality of academic programs have been developed, which has not been implemented yet. Partial improvements to the curriculum are made based on the feedback from the graduation paper and master thesis defense committees. There is no monitoring of academic programs at the university.

The expert panel takes into consideration the fact that the university has not yet had graduates with a bachelor's degree, so their effectiveness has not been evaluated. However, the chairs did not carry out analyses and systematic improvements of MA academic programs.

CONSIDERATIONS: The expert panel considers it positive that ShUT has made improvements in the academic programs. From the point of view of the outcome, the choice of teaching methods, however, there are no assessments of the impact of the implemented changes. This means that this process is in the planning and implementation phase of the PIEI cycle.

On the positive side, the development of academic programs was preceded by comparative analyses of relevant curricula at different universities. Through such comparisons, the university has tried to carry out analyses, which are in fact benchmarking attempts. Through this, the university will probably create the necessary initial conditions for the further mobility of students and teachers, which in turn will contribute to the internationalization of the university.

No analysis of the unified system of assessment of students is implemented at ShUT. There are no criteria for the evaluation of graduation papers and master's theses. This makes the transparency and objectivity of assessment and credibility of awarding qualifications risky.

The academic program monitoring policy is not fully implemented in ShUT. Only student surveys are used as a mechanism, which are of a limited nature and are not conducted among part-time students. No changes were made to the academic programs as a result of the surveys. External stakeholders are not involved in the academic program monitoring process. All of this can jeopardize the sustainability of academic programs, the competitiveness of graduates, and create a rift with the labor market.

The lack of clear evaluation criteria as well as effective methods of combating plagiarism in the relevant regulations on defense of graduation papers and master's theses, can lead to a violation of academic integrity. However, the expert panel considers the students' awareness of the appeal system to be positive.

SUMMARY: Taking into consideration the fact that ShUT implements academic programs in accordance with its mission, ensures the selection of teaching-learning methods aimed at the achievement of learning outcomes, the involvement of students in the formation and selection of the above-mentioned methods, as well as the existence of the assessment appeal system, benchmarking policy, policies and procedures of assessing the quality of academic programs, the expert panel concludes that ShUT meets the requirements of Criterion 2.

CONCLUSION: The expert panel evaluates the compliance of NKR ShUT institutional capacities with the requirements of the CRITERION 3 as **satisfactory**.

IV. STUDENTS

CRITERION: The Institution provides support services to students ensuring productive learning environment

FINDINGS

4.1. The Institution has set mechanisms for promoting students' recruitment, selection and admission procedures.

The policy of ShUT in the field of student recruitment, selection and admission is set out in the 5th goal of the Strategic Plan: "To develop the advertising processes of the University admission, to optimize the admission, to bring it in line with the development needs of the region, the demands of the society and the labor market."

Admission of applicants to full time bachelor's education system is implemented according to the "Regulation on admission (according to the bachelor's educational programs) of the NKR state-non-state higher educational institutions" approved by the NKR Government decision N301-N of May 14, 2012. Admission is based on the results of the joint state exams. According to the decision of the government, students are admitted to some of the required specialties, "Food Technology", "Agronomy, Selection and Genetics", "Veterinary Medicine", "Agricultural Mechanization, Machinery and Equipment", by the grades of the final school diploma.

Targeted actions are taken aimed at applicant recruitment and professional orientation according to the Vice Rector's pre-designed schedule, meetings are organized in the schools of the Artsakh Republic with the participation of employees and students of different subdivisions of the institution. During the meetings, the applicants are provided with booklets, through which they are informed about the official website and Facebook page of the University. A video about the institution is being shot, which is shown on Artsakh Television. It informs about the places and order of admission, as well as list of professions and required documents.

During the meeting with the expert panel, many of the students mentioned that they had participated in the "Open Doors Days" and "Informative Visits to the University (SP Objective 5, 1.6 point) programs organized by the university, which was a stimulus in the process of selecting ShUT.

Admission to the master's program is carried out in accordance with the "Reugilation on admission to and education in the master's degree in NKR higher educational institutions." In order to organize the admission, an admission comittee is formed, chaired by the rector, and the process is carried out in two stages.

The admission system consists of a large number of high-achieving high school alumni who continue their education at the university. In 2017-2018 about 70 students were admitted to ShUT.

4.2 The Institution has policies and procedures for assessing student educational needs.

The University's approaches to identifying the educational needs of students are enshrined in the documents named "Policy of Educational Needs of Students at Shushi University of Technology" and "Quality Assurance Policy of Shushi University of Technology" approved by the Scientific Council.

One of the main mechanisms for identifying needs is the survey on students' satisfaction with the quality of teaching and education received. It is aimed at assessing the quality of the lecturer activity and course by the students.

Although students of the full-time system actively participated in the surveys, not all of them were informed about their results.

Since 2018 there has been an "Application-Complaints Box", near the bulletin board of the building which allows students to raise their concerns by means of applications-proposals.

Identifying the educational needs of students is one of the main directions and aims of the Student Council. Students are introduced to the issues raised by the Student Council at the meetings of the Faculty Council lu University Scientific Council.

For each year of students, an instructor is appointed, who is responsible for the given students, in case of problems, apply to the relevant departments of the University, as all organizational units of the University are involved in the process of identifying and meeting the needs of students.

As the expert meetings showed, the students mainly turn to the instructor for their needs, although the university has developed other mechanisms through which they can also voice their grievances or suggestions.

Students are included in the University Scientific Council and Faculty Councils, as well as EthicsCommittee and Quality Management Committee, which makes their questions heard.

4.3 The Institution provides opportunities for extra-curricular activities and advising services aimed at supporting student effective learning.

The policy of the University in the direction of organizing additional classes and providing counseling is fixed in the 1.1.6. objective of the 1st goal of the SP. It envisages the development of additional educational and consulting services programs.

In addition to the advisory services provided by the instructors, the chairs organize additional professional consultations according to the approved schedules on the subjects taught by the chair during the given semester. Students who need additional advice on the subjects taught, take part in the classes, if they did not master the given topic, were absent from the given lesson, did not find the necessary sources on the topic, etc.

Prior to the final attestation at the university, consultations (review lectures) are organized for the students according to the approved schedule, as well as pre-defense of graduation papers / master's thesis.

The university surveys the level of students' satisfaction with additional counseling services, the purpose of which is to increase the effectiveness of the events organized.

4.4 The institution has set regulation and schedule for students to receive additional support and guidance from the administrative staff of the faculty.

The additional support and guidance provided to the students by the administrative staff at ShUT is coordinated by the regulations specially developed for that purpose by the Scientific Council of the University and approved in April, 2019. The regulations stipulate which administrative employee or body students can apply to for assistance, from the rector to deans and heads of chairs. In addition, the university regularly organizes student meetings with representatives of the administrative staff (rector, vice-rector, etc.).

Students address their concerns and problems orally and in written form to the deans of the faculties, the educational-methodological department, other administrative bodies, and as it was mentioned during the meetings, the problems raised by the students are mostly solved.

Students' satisfaction with administrative support from the 2018/2019 academic year is assessed through surveys, the results of which show that students are satisfied with the support and guidance provided by the dean's offices, chairs, and educational-methodological department.

4.5 The Institution has student career support services.

In order to strengthen students' connection with the labor market the post of Deputy Rector for Student Affairs has been formed in 2018, and at the beginning of 2019, the "Career Center for External Relations and Student Affairs" was established.

As the center is newly established, it is not possible to evaluate its effectiveness, but before that the functions were performed by the educational-methodological department, the chairs, the research sector, the student council. The activities of the University Student Scientific Society have contributed to the students' careers. The research laboratories and other departments also employed high-achieving BA and MA students and graduates.

The participation of employers in the final attestation commissions gives students the opportunity to receive their attention and get a job offer if they excel.

4.6 The Institution promotes student involvement in research activities.

The second University SP goal of research և innovation stipulates to expand the involvement of students in research activities.

The master's educational program of the university envisages the implementation of scientific research works, internships and master's thesis. From the first year a supervisor is attached to each master student and at the end of each semester, the result of the work done is summarized in the achievement sheet.

To engage students in research activities the ShUT Student Scientific Society was established in 2017, which includes 15 students. The charter of the scientific society was also developed in 2017, which stipulates the functions, rights and responsibilities of the SSS, the implementation of activities. It organizes the coverage of students 'scientific activities in journals, supports the organization of annual student conferences, consultations, meetings, and the publication of students' scientific papers.

4.7 The Institution has a special body, which is responsible for the protection of students' rights.

Students are informed about their rights and responsibilities by the educational advisor, student organizations, student guide, University website, bulletin board, etc.

The University has had a Student Council since being established, the priority of which is to protect the rights and interests of students at the University.

4% of students are included in the Student Council. The Student Council has a Facebook page that informs about all the events, as well as covers the student life at the University.

As a result of the survey of the University students concerning the work of the Student Council, the satisfaction in the 5-point system is higher than 4.05 for all faculties.

4.8 The Institution has set mechanisms for the evaluating and ensuring the quality of educational, consultancy and other services provided to students.

As the Internal Quality Assurance System of Shushi Technological University is in the process of implementation, it is difficult to talk about sustainable quality assurance mechanisms. Quality assurance policy and some procedures have been developed. One of the policy issues is to monitor the services provided by the university and to increase its efficiency.

Assessment of students' educational, counseling, support and other services and Quality assurance in ShuT are carried out on the basis of the "Lecturer through the eyes of students" survey, the survey on graduate satisfaction with the education received,the survey on students' satisfaction with the administrative staff, consulting services and infrastructure. These surveys have just been introduced and their effectiveness has not been evaluated.

CONSIDERATIONS. The expert panel finds it positive that there are clear mechanisms for student recruitment and admission in ShUT. However, on the other hand, the university should value the role of a policy of recruiting foreign students, which would contribute to the internationalization of the university, as well as increase financial income.

Surveys are used as mechanisms to identify students 'educational needs. However, there are no qualitative analyses of survey results that could identify students' target needs.

As the Career Center is newly established, the analysis of the satisfaction of the graduates և employers, the effectiveness of the internship organization, as well as the employment of the graduates, which would confirm the effectiveness of the above-mentioned structure, has not been carried out yet. In addition, as a result of the expert visit, it became clear that most of the students are not familiar with the activities of the Career Center. The self-evaluation shows that a small number of students use the services of this body, and it has not been studied which part is satisfied with the services of the center.

The expert panel positively assesses the existence of a student scientific society, but the planning and coordination of the structure need to be improved. Various departments, including the Student Council, are actively involved in the protection of the rights of students and their other educational needs. However, the work of the student council is not constantly monitored, which would contribute to the effective operation of the institution.

SUMMARY. Taking into consideration the fact that there are student recruitment and admission structures in ShUT, there are procedures for studying the educational needs, in order to ensure an effective educational environment, students are provided with appropriate guidance and counseling, there is a body responsible for protecting students' rights, the expert panel concludes that ShUT meets the requirements of Criterion 4.

CONCLUSION. The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 4 as **satisfactory**.

V. FACULTY AND STAFF

CRITERION: The Institution has a highly qualified teaching and support staffs to achieve the set goals for academic programs and institution's mission.
FINDINGS
5.1. The Institution has policies and procedures promoting recruitment of a highly qualified teaching and supporting staff for the provision of academic programs.
Objective 3 of Goal 1 in the 2016-2021 Strategic Plan of Shushi University of Technology refers to the teaching staff. It is especially mentioned here: "To develop a program for admission and qualification improvement of the teaching staff".

There are also three goals to be achieved, where the university is involved in the development of a long-term program for staffing, evaluation, improvement, as well as development and implementation of pedagogical and psychological skills training courses for young lecturers, and the creation of appropriate conditions and incentive mechanisms for lecturers.

The policy of hiring and firing faculty members as a separate document is still under development. There is a procedure for selecting teaching staff at the institution, where the main requirements for the professional qualities of the teaching staff are formulated. There are many categories for teaching staff (13 in number), but there is no clear selection policy.

The university recruits scientific and pedagogical staff for the implementation of educational programs, who, as a rule, have a basic education corresponding to the direction of teaching courses, are engaged in research and scientific-methodological activities related to the field of teaching. Academic degree (academic title) and / or work experience in the field of relevant activity is

mandatory for lecturers of specialization courses. Well-known specialists and employers are invited for secondary employment. During the visit, 35 practical specialists worked at the University.

It should be noted that some of the main teaching staff of the university has 10-13 courses in their workloads, and most of the lecturers are hourly paid employees. However, the university appreciates the presence of hourly paid and invited lecturers, which contributes to the formation of mentoring relations among the academic staff. The number of full-time lecturers is increasing year by year, and the number of hourly paid lecturers is decreasing, which is a consequence of the recruitment of local teaching staff.

The practice of hiring its own best graduates is exercised in ShUT. Currently, 13 students and graduates of the University are included in the teaching and support staff.

5.2 The requirements for qualifications of teaching staff per academic program are comprehensively stated.

There are no clear requirements for the professional qualities of the teaching staff for each educational program in the NKR ShUT. Recruitment of the teaching staff is carried out by competition or invitation; competition commissions and University governance bodies pay special attention to the professional qualities of the staff . The person's work experience, basic education, experience in research and scientific-methodological activities are taken into account.

Analysis of the reports of the Chairs of the final attestation board also allows concluding that the lecturers successfully implement the goals of the educational programs with their teaching methods and professional skills, but there is no requirement for academic staff in the specifications of the academic programs. Moreover, there are no mechanisms for revealing the correspondence of lecturers to this or that academic program.

The procedure for calculating and distributing the workload of the teaching staff is approved by ShUT, which stipulates that only lecturers with academic degree are allowed to deliver lectures at BA and MA.

5.3 The Institution has well established policies and procedures for the periodic evaluation of the teaching staff.

Based on the requirements of objective 1.3 of the ShUT 2016-2021 strategic plan, the university has set a goal of staffing the university with qualified specialists. In order to solve this problem, the university has developed mechanisms and implements evaluation of the teaching staff according to professional training, pedagogical mastery, personal qualities and age. The regulations on "Evaluation of professional qualities and work of the teachers at Shushi University of Technology", "Organization of Surveys at Shushi University of Technology" are in force. It should be noted that the evaluation systems of the teaching staff were developed mainly in 2019.

A special role is given to the surveys conducted among the students on the quality and effectiveness of the teaching: students surveys titled "Lecturer through the eyes of the student" are conducted. Besides, in order to study the opinion of the graduates, the surveys of the satisfaction with the received education are conducted. However, the surveys are not regular, their schedule is not specified. Apparently, the surveys as an evaluation mechanism are still in the planning and partial implementation stage at the university.

One of the mechanisms for evaluating the teaching staff of the University is the class observations conducted by the chairs (in May 2019, the order of organizing class observations was approved, according to which it is planned to organize open and mutual class observations as well). Class observations are held according to the schedule approved by the chairs meetings, are recorded and discussed in the chairs. Class observations are also conducted by the administrative staff (deans, deputy rectors) and Quality Assurance Department.

One of the mechanisms for evaluating the lecturer at the chair level is the lecturer's semester and annual reports, on the basis of which the reports of the heads of chair and later reports of the dean

and of higher units are compiled . So, the accountability of the university is carried out from bottom up.

As it was revealed during the site visit, no clear problems were identified as a result of these mechanisms, as systematic assessment approaches are not used.

5.4 The Institution promotes professional development for the teaching staff in accordance to the needs outlined during regular evaluations (both internal and external).

Objective 3 of Goal 1 of ShUT Strategic Development Plan stipulates to develop a long-term plan for improving academic staff, to develop and implement training courses in order to develop pedagogical and psychological skills for young lecturers.

As the university is newly established, it does not yet have an approved educational-scientific program for improving the qualifications of lecturers, but some work has been done to improve the teaching staff. Lecturers are trained in RA universities. Thus, for example, the trainings for professional development involved:

- 4 lecturers from the Chair of Humanities in the 2016-2017 academic year,
- 4 lecturers from the Chair of Information Technologies and Natural Sciences in 2017-18 academic year,
- 4 lecturers from the Chair of Humanities in 2018-2019 academic year.

Specialists from abroad and Armenia are also invited to give lectures to students. However, the institution does not identify the professional and pedagogical needs of the academic staff, as a result of which unsystematic measures are taken to improve the academic staff, and the initiator of the training is the lecturer. Accordingly, the trainings are carried out by the lecturer's wish, and not according to the needs identified by the university . They are mainly implemented in the format of conferences, round tables, discussions.

No training is provided to improve pedagogical and psychological skills.

The number of lecturers participating in the trainings is only 1.9% of the university's staff, and no mechanisms are used to determine the effectiveness of the trainings.

5.5 The Institution ensures that there is a permanent staff for the stable provision of the academic programs.

According to the institutional capacity self-evaluation report presented by ShUT, only 131 out of 213 lecturers working at ShUT in the 2018/2019 academic year are the main ones. 37 lecturers from the administrative staff of the university teach concurrently, and 28 lecturers are invited from Armenia. In other words, 38.5% of the university's teaching staff works on an hourly basis.

ShUT is working to rejuvenate its academic staff, hiring its graduates, assisting them in the approval phase of research topics, and the policy of encouraging staff has been submitted to the SC for approval. The result of the introduction of the rejuvenation policy is that the number of lecturers under 35 years old in 2018/2019 academic year, compared to the 2017/2018 academic year, increased from 30% to 45% per year. This happened at the expense of the teaching staff aged 35-65, as their number, according to the self-evaluation, has decreased from 56% to 30% over the past year. The number of academic staff over the age of 65 has increased from 14% to 25%. It is obvious that the number of young and older lecturers has increased at the expense of the middle-aged lecturers, and increase in the number of young people is more obvious.

In the documents submitted by ShUT, there is The "Policy and Procedure for Ensuring the Stability of the Academic Staff of the Shushi University of Technology" approved by the decision N 2-03/19/3, of March 26 2019, the most important point of which refers to the formation of the personnel reserve, which allows to implement the projected personnel policy.

According to the requirements of the order of awarding categories to the teaching staff of ShUT, changes of categories take place, in accordance with which the salary is regularly increased; the average teaching salary is 1.72 times higher than the official average salary in Artsakh, which contributes to the relative stability and professional development in the university. However, it

should be noted that clear mechanisms for encouraging the professional development of lecturers at the university have not yet been introduced.

According to the procedure approved by the SC, ShUT has a mentoring policy, according to which the novice lecturers are supported by experienced specialists, which promotes more natural integration of young people in the activities of the chair, creating a favorable working atmosphere, and respectively, stability of the academic staff.

5.6 There are set policies and procedures for the staff promotion.

The first goal of the NKR ShUT 2016-2021 Strategic Development Plan refers to quality education. Objective 1.3 is comprised of three objectives to achieve the goal, which describe the university's vision for the recruitment and qualification improvement of teaching staff, and are directly related to the professional advancement of the academic staff.

The University SC approved the "Procedure for awarding categories to the faculty of Shushi University of Technology", "The policy of mentoring of novice teachers of Shushi University of Technology", the development and implementation of which were aimed to stimulate the professional development of the faculty.

The set categories are numerous (13 categories), where lecturers with academic degree or title have a certain advantage.

As for the mentoring policy, the university administration considers its introduction urgent, as the governance system of ShUT is guided by the rejuvenation policy of the academic staff. However, on the other hand, along with the increase in the number of young AS members (under 35 years old), the share of middle-aged academic staff members (35-65 years old), who are considered to be the main mentors of young people, has decreased.

In 2016-2019 5 lecturers defended PhD dissertations, 2 of which were in the field of technical sciences, 2 in the field of agriculture, and 1 in the field of economics. However, as compared to 2017-2018, in 2018-2019 the share of academic staff with a scientific degree has decreased (from 33.1% to 18.3%). There is no analysis to clarify the situation at the university.

The most important component of ensuring the professional advancement of the teaching staff is the qualification improvement of the academic staff, which is of a non-coordinated nature in ShUT, the trainings are carried out according to the lecturer's wish and not according to the identified needs.

Peer class observations at the university also serve as a means of ensuring the professional advancement of lecturers.

5.7 The Institution has necessary administrative and support staffs to achieve the strategic goals.

According to ShUT self-evaluation report, the university currently has 54 administrative և 26 support staff employees. The quality of the administrative and support staff at the University is monitored by a number of mechanisms, including the preparation of their annual work plans and reports on their work.

The university conducts surveys to identify problems in various fields, to determine the degree of satisfaction of stakeholders with the activities of university bodies, the organization of which is enshrined in the "Regulation on organizing surveys at Shushi University of Technology".

Both external and internal stakeholders (employers, students, faculty, administrative-support staff, etc.) take part in the surveys. The existence of surveys is considered a positive fact by the expert panel, but this mechanism is not fully used by the university, and the results of the surveys are not analyzed, which hinders the formation of a real picture of the administrative and teaching staff.

During the observation of resources and meetings with the staff of the University, the expert panel noticed a non-optimal distribution of the teaching staff, which once again indicates that it is necessary to carry out a correct assessment of human resources at the University. It should be noted that the university does not fully carry out the certification of administrative and support staff, as well as identification of needs, on the basis of which their alignment with the implementation of strategic goals will be carried out.

CONSIDERATIONS: In its strategic plan, ShUT focuses on the development of a long-term plan for recruitment, evaluation and improvement of teaching staff, as well as creation of appropriate conditions and incentive mechanisms for lecturers. However, the university does not yet have developed mid-term and long-term programs to stimulate quality implementation of the academic programs aimed at ensuring the stability and qualification of the academic staff. This is also important from the perspective that there are no requirements in the specification of academic programs for the involvement of teaching staff in the curricula.

The expert panel considers that the process of staffing and creating appropriate working conditions at the university are currently at a sufficient level, but the processes of their evaluation, development of qualification improvement programs, as well as the creation and implementation of incentive mechanisms are lacking as such. There are few lecturers participating in the qualification, and their organization is not based on the results of internal and external evaluations, i.e. they are not targeted. There is a procedure for selecting teaching staff at the institution, which sets out the basic requirements for the professional qualities of the teaching staff, but there is no clear selection policy; there are no clear requirements for the professional qualities of the teaching staff for each academic program.

A significant part of the lecturers at ShUT are invited and hourly paid employees, which, according to the observations of expert panel, contributes to the recrutiment of academic staff with practical skills and the development of mentoring relations. It is problematic that in the workloads of some of the main academic staff of the university there are 10-13 courses.

One of the mechanisms for evaluating the teaching staff of the university are class observations, which are held regularly by the, chair and the administration. As for the surveys, they are not regular and are not conducted among part-time students.

The expert panel considers it positive that improvement and training events are carried out during the visits of invited lecturers and specialists. However, their organization is not based on the results of internal and external evaluations, i.e. these types of trainings are not targeted.

One of the mechanisms for evaluating a lecturer at the chair level are the lecturer's semester and annual reports. The accountability of the university is carried out from the bottom up, i.e. the complex report of the teaching staff occupies a large proportion in the annual report of the rector, as it is a major part of the report of the head of the chair, and later that of the dean and vice-rectors.

The expert panel considers it positive that the university management system is guided by the policy of rejuvenation of the academic staff. On the other hand, the average age of the academic staff, as well as the number of those with academic degrees has decreased, which can seriously jeopardize the implementation of research activities in the institution. However, according to the requirements of the procedure for awarding categories to the teaching staff of ShUT, changes of categories take place, in accordance with which the salary is regularly increased, which contributes to the professional advancement of the lecturers and the stability of the academic staff.

The university has not assessed the adequacy and capacity of human resources (academic staff, administrative-teaching support staff), for the implementation of the goals of strategic development plan of the university.

SUMMARY: Taking into consideration the fact that ShUT in its 2016-2021 Strategic Development plan focuses on a long-term plan for faculty recruitment, evaluation and improvement, as well as creates appropriate conditions and incentive mechanisms for faculty, implements the faculty recruitment and selection process, creates sufficient working conditions, promotes professional advancement through various activities and procedures, tries to create a system for improving the qualification of the academic staff, and there are some mechanisms for the evaluation and identification of needs, the expert panel concludes that ShUT has necessary teaching staff for the implementation of the academic programs.

CONCLUSION: The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 5 as **satisfactory**.

VI. RESEARCH AND DEVELOPMENT

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

        FINDINGS

6.1 The Institution has a clear strategy promoting its research interests and ambitions.

The second goal of the NKR ShUT 2016-2021 SP refers to research and innovation. It states: "To extend the involvement of teaching staff and students in research work, to promote the expansion of academic cooperation and internationalization of research work." There are also four objectives to achieve the goal, but there is no document specifying the research directions typical of the university. The University considers the solution of the problems of the Republic of Artsakh in the spheres of activity highlighted by the mission as research directions, that is, the implementation of research work and provision of research services in the fields of information technology, agriculture, architecture, construction and other related fields.

The university has chosen a strategy, according to which specialized departments should have targeted research areas that are considered a priority for the region.

6.2 The Institution has a long-term strategy and mid-term and short-term programs that address its research interests and ambitions.

ShUT considers the 2016-2021 SP as a long-term project in the field of research, after the approval of which a schedule-plan for its implementation has been developed. However, the work planned here is also not interrelated to the research activities of the university, which is written in the mission. In addition, the plan sometimes lacks the required additional financial resources and sometimes the expected outcomes.

The document "Long-term, medium-term and short-term research programs of Shushi University of Technology" was also presented by ShUT, which rather contains policy elements. It lacks planning of work and connection with research directions. There are no project implementation responsibilities, deadlines, resource data or expected results.

Short-term research plans at the University are considered the annual plans of the teaching staff, which contain requirements related to the research.

6.3 The Institution ensures the implementation of research and its development through clear policies and procedures.

The University does not yet have established policies and procedures for conducting research.

Institutional research at ShUT is initiated by the chairs. There are no procedures aied at research development. There are 8 laboratories, but the connection of their activity with the SP and mission of ShUT is weak: development policy and priorities are not specified. Involvement of academic staff and MA graduates in the activities of the mentioned structures is not regulated.

Expert studies show that there is a lack of research promotion policies and structures that promote the development of research capacity of the academic staff.The English-language periodical "Bulletin of High Technologies" is published at ShUT, which is included in the list of journals accepted by the SCC. During 2016-2019 102 articles were published in this periodical, 65 of which were published by the academic staff of ShUT.

According to the university rules, "At least one scientific article, or a report presented at a conference, or a thesis, or a copyright license (certificate) for each graduate student is required to submit a master's thesis for defense." Moreover, the expert panel study of the students' published scientific works showed that they mainly lack the research component, they are more of a descriptive-abstract nature.

The submitted documents also contain the SSS report for 2018 activities. However, it lacks the analyses, the conclusions based on them and the connection with the research directions of the university.

The number of articles, monographs, abstracts, and textbooks published by the ShUT students and academic staff in 2016-2019 is presented in the table below.

N	Publication	2016-2017	2017-2018	2018-2019	Total
1	Article	88	96	147	331
2	Memoir		1	1	2
3	Textbook			1	1
4	Educational manual	1	1		2
5	Educational-methodological manual	3	5	4	12
6	Theses of reports		2		2
Total		92	105	153	350

About two dozen patents issued by the Intellectual Property Agency of the Republic of Armenia have been developed and received in the ShUT Laboratory of Natural Sciences and Technology. The Quinester skin care product developed by the same laboratory was tested at the EurofinsBel / Novamann laboratory in the European Union (Slovakia) and the results were positive. According to the vision of ShUT, each chair should be engaged in research relevant to its activities. This is proven by about a dozen scientific research works carried out in different chairs of the university. However, there is a lack of long-term planning of research processes and their interconnection with the research priorities of the SP.[2]

During 2016-2019 5 lecturers defended PhD dissertations, 2 of which were in the field of technical sciences, 2 in the field of agriculture, and 1 in the field of economics.

By the decision N 1-02 / 19/2 of February 7, 2019 of Scientific Council of Shushi University of Technology, the "Regulation on Academic Honesty at ShUT" was approved, which defines the procedure of academic honesty, academic dishonesty, prevention of dishonesty, and taking responsibility.

6.4 The Institution highlights internationalization of its research.

Although ShUT in objective 2 of its 2016-2021 SP (Research և Innovation) highlights "internationalization of research", there are no clear measures aimed at internationalization of research in the objectives.

In 2019, the Scientific Council of ShUT approved the policy of international cooperation, which supports Artsakh scientists to present Armenian science in foreign universities, to become a center for research and consulting services in the international arena. The objectives of the same document also mention the implementation of international research programs. But these problems have not been solved yet.

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[2]The text was added as a result of the discussion of the institution's observations and suggestions.

There are no publications in impact journals. As it turned out from the analysis of the expert panel, the academic staff was also not motivated to have publications in such periodicals.

There are foreign scholars in the editorial staff of the English-language High Tech Bulletin, but these journals do not contain publications by foreign specialists.

ShUT also lacks international grant programs. There are no partnerships with other universities to carry out research initiatives.

6.5 The Institution has well established mechanisms for linking research with teaching.

There is no systematic approach to the interconnection of research activities with the educational process, but some partial steps have been taken. In particular, the masters of "Agronomy" specialty were involved in the framework of the "Raspberry", "Garlic" and conducted thesis research based on the field experiments on the given crops; in the course of his thesis, a master student of "Food Technology" studied the technologies of obtaining essential oil from various essential oil plants. It seems that the university sees the connection between the educational process and research within the topics of the master's theses, as well as in the internship process.

The regulations on submitting, approving, forming, defending, organizing, and conducting master's thesis topics are formulated, but they do not specify the research functions to be performed by students.

On the other hand, there is almost no student participation in a few research or grant projects.

CONSIDERATIONS: The NKR ShUT highlighted research and innovation in the second goal of its SP, but the research directions of the university's activities are not specified. The availability of human and material resources in the field of research is not assessed, on the basis of which it would be possible to plan research activities in priority areas based on the existing research potential.

It is commendable that the management system of ShUT pursues the policy of rejuvenation of the academic staff. On the other hand, at the same time, the average age of the academic staff and the number of those who have a degree have decreased, which can seriously jeopardize the implementation of research activities in the institution.

In spite of the existence of research "long-term, medium-term, short-term programs", it lacks planning of work and connection with research directions. There are no people responsible for project implementation, as well as no deadlines, resource data or expected outcomes.

The expert panel values the existence of SSS in the university, but the structure still has work to do aimed at interconnection of the research process with the educational one, as well as involvement of students and organization of various research processes.

It is commendable that the university has certain research activities, in particular, by the laboratory of natural technologies. It is likely that the development of research activities here is promising and may further contribute to the inflow of funds.

ShUT has a lot to do in terms of internationalization of research, as no significant international research activities have been carried out so far.

There are no mechanisms for close interrelation between research activities and the educational process at the University.

SUMMARY: Taking into consideration the fact that the research spheres are not specified in the NKR ShUT, the human and material resources are not evaluated from the point of view of conducting research, there are no incentive mechanisms for academic staff and students to carry out innovative and research work, there is no participation of the academic staff in foreign research programs, examples of internationalization of research activities of the university are few, and the link between research and learning is weak, the expert panel concludes that the university does not ensure the implementation of research activities and the link with learning.

CONCLUSION: The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 6 as **unsatisfactory**.

VII. INFRASTRUCTURE AND RESOURCES

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

FINDINGS

7.1 The Institution has an appropriate learning environment for the implementation of current academic programs.

The 4th goal of ShUT 2016-2021 SP (Quality Infrastructures) stipulated "to form university infrastructures that meet the requirements of the implementation of academic programs". In order to achieve the goal, it is necessary to overcome the following two problems:

1. To develop the classroom and laboratory conditions necessary for the implementation of the educational process, to modernize the infrastructure of the University;

2. To develop the information systems necessary for the implementation of the educational process and library infrastructure.

During the self-evaluation of the university, about 1200 students studied there, whose classes are organized in 60 classrooms of 4 educational buildings. The educational territory of the university is enough to organize one-shift education. In addition, there are 7 training laboratories, computer and interactive classrooms, 123 computers are connected to the internal network, Wi-Fi connection is provided.

The library has 4 book depositories, 1 reading hall of 49 sq.m. area. The latter is provided with appropriate furniture, internet connection, technical equipment, computers, printers. The library has a fund of scientific, educational and fiction literature in Armenian, Russian and foreign languages with 31050 units of literature. In 2017, The university library received a donation from Yerevan Institute of Water Problems and Hydro-Engineering after I.V. Yeghiazarov (12100 units of literature).

There is also a food outlet and an infirmary at the university.

Some of the problems of the SP have not been overcome yet (the existing laboratory conditions need to be improved, there is a need to establish a number of training laboratories, stands for laboratory work envisaged by educational programs, training equipment, test equipment, appropriate methodological provision, modern literature, digitalization of literature, electronic document circulation, unified forms of set documents, etc.).The university does not have a gym or a sports ground to effectively organize physical education classes.

7.2 The Institution provides appropriate financial resources with necessary equipment and facilities as needed to achieve its mission and goals.

The management and control of financial flows in the NKR BSEC is carried out on the basis of the annual estimate of budget revenues and expenditures, and after the end of the financial year the annual budget performance is presented. The budget of the ShUT is approved by the Ministry of Education, Science and Sports of the Republic of Artsakh. In 2016-2018, the main revenue items of the ShUT budget are allocated as follows: Tuition fees make up about 8.92% of the incoming part, state funding comprises 89.2%, other incomes amount to 1.5%. In recent years, the university's income has been growing due to the growing number of students studying in the paid system. Along with the increase in the total annual expenses, the educational expenses also increased. As a result, educational expenses per student increased.

ShUT in the second objective for the implementation of the 6th goal of its 2016-2021 SP (financial stability and effective management) stipulates "To develop the financial planning system, increase the efficiency of financial and material resource management". However, the allocations of funds in the university budget are not separated according to the goals of the SP, and, according to the university governance, they are still insufficient for the full implementation of the goals. In particular, appropriate resources are not provided for the promotion of research at the university, the

development of an internal quality assurance system, the development of a system for external and international relations, as well as for the provision of teaching and research laboratories with the necessary facilities and equipment.

7.3 The Institution has policy on financial distribution and capacity to sustain and ensure the integrity and continuity of the programs offered at the Institution.

On the way to the implementation of the second objective of the 6th goal of its 2016-2021 SP, ShUT highlights "Developing financial and material resource management policies and procedures to ensure the allocation of the budget according to the strategic goals and objectives of the University". However, as the analyses of the expert panel show, and as it is emphasized in the self-evaluation, the financial resources are not allocated according to the academic programs.

By the decision of 31.08.2018 Nl-08/18/10 of the Scientific Council of ShUT, the financial policy of ShUT was approved, which presents the goals and objectives of the financial policy of the university, the main directions of financial policy development and financial management in the university. However, this document does not emphasize the policy of allocating funds, which will contribute to the achievement of the goals of the university's educational programs. On the other hand, the mechanism of collected applications based on the needs of individual departments each year can be considered as a policy of allocation of funds.

7.4 The Institution's resource base supports the implementation of Institution's academic programs and strategic plan, which promotes sustainability and continuous improvement of quality.

ShUT in its 2016-2021 SP (Goal 4, Quality Infrastructure) focuses on modernization of classroom-laboratory conditions based on academic programs.

In order to obtain resources at the university, applications are submitted by the departments, according to which the purchase and distribution process is organized by drawing up the relevant documents.

For the implementation of educational programs in ShUT there are laboratories of circuitry engineering, physics, chemistry, agrochemistry, veterinary, agricultural mechanization and transportation, as well as water problems and drip irrigation laboratories together with the Institute of Water Problems after Academician Yelizarov. There are also agricultural-experimental land, newly built livestock and poultry farms of Sarushen training base, Khnapat "Pedigree Station" CJSC, where students carry out practical and laboratory classes, as well as educational, production and pre-graduation internships. However, the low resource base of the teaching laboratories located at the university does not yet allow to carry out quality laboratory and practical work. The academic programs do not have the necessary resource base for the quality implementation of the relevant educational program.

Laboratory hours are quite large in all approved educational programs. During the resource monitoring visit, the laboratories did not have methodological instructions for performing laboratory work. Moreover, the methodological instructions published by the chairs are also insufficient for laboratory work (in 2016-2019, 1 textbook, 2 educational handbooks, 12 teaching-methodological manuals were published).According to the results of the surveys conducted among the graduates, they also rated the level of practical skills provided by ShUT as relatively low: 3.48-3.76.

There are also few computer classrooms (3 interactive learning classrooms, 6 computer classrooms).

As the analyses of the expert panel and surveys conducted among the stakeholders show, the professional literature is also insufficient in the library. In addition, digitalization of literature in demand among stakeholders has not yet been implemented.

7.5 The Institution has a sound policy and procedure to manage information and documentation.

In order to improve the documentation processes in the NKR ShUT, the "Office Procedure of Shushi University of Technology" was approved by the decision N1-07 / 19/2 of the Scientific Council on July 8, 2019. However, this document was not provided to the expert panel within the framework of self-evaluation. This document coordinates a number of processes: registration, compilation,

compliance, signing, approval of documents, as well as document execution deadlines , execution of documents and its control, sealing and approval of copies, functions of the general department and HR department, handling and storage of forms and files. During the site visits to different subdivisions by the expert panel, it was revealed that the same content orders for different chairs are formulated with non-uniform documents. In addition, some orders lack a legal basis.

Information process management policies and procedures are not set out in ShUT. As it turned out from the meetings between expert panel and students, many students (especially part-time students) were unaware of the existence and activities of the various ShUT departments (External Relations, Student Affairs and Career Center, International Cooperation Department, Ethics Committee). The main means of spreading information in ShUT is the website. It contains the decisions of the Scientific Council of the University, the minutes of various sessions, charters, regulations, procedures, decisions of the Rectorate, curricula of the chairs, credit system guidelines, announcements of vacancies for Deans and Chairs, events, announcements, news, etc. There is also a Facebook page. Since 2016, the Publishing, Media and Public Relations Department has been operating.

7.6 The Institution creates safe and secure environment through health and safety mechanisms taking into account the students with special needs.

There is an infirmary in the educational building of ShUT, which is provided with the necessary medicine and equipment for first aid. The infirmary employs one medical worker, who provides first aid on the spot if necessary.

There is a headquarters of civil defense for emergencies at the university. The evacuation schemes and exit signs are posted on all floors of the university. However, the university corridors are quite narrow, which can hinder the rapid evacuation of students in an emergency.

A fire-fighting panel with the necessary equipment is installed in the territory of the university. For security reasons, there is a checkpoint in the University, as well as a video surveillance of the building.

It should be noted that during the expert visit it became clear that the rules of safety equipment storage were not posted in the classrooms and laboratories.

Special conditions for the education of students with special needs related to mobility are not yet available at ShUT.

7.7 The Institution has special mechanisms in place for the evaluation of the effectiveness, applicability and availability of resources given to the teaching staff and learners.

There are no specially designed mechanisms in ShUT to assess the applicability, availability and effectiveness of the resources provided to teachers.

There is also no mechanism for assessing the applicability and availability of resources by students, but the following surveys are used to assess the resources provided: "Lecturer needs assessment", "Student satisfaction with administrative staff, counseling services, teaching and support services, infrastructure", and "Graduate assessment". There is also a section of student opinions and suggestions in the mentioned questionnaires. As a result of these surveys, the following domains mainly need improvement (the aspects mentioned in the table are comparatively low)>

N	Satisfaction with the resource, serivce	Grade
1.	Satisfaction with academic programs and organization of educational process	80.6%
2.	Satisfaction of graduates with Student Council	4.29 (out of 5)

3.	Satisfaction with additional counselling services *Agricultural Faculty* *Architectural-Engineering Faculty*	3.95 (out of 5) 4.17 (out of 5)
4.	Satisfaction with professional literature at library *Agricultural Faculty* *Architectural-Engineering Faculty*	3.99 (out of 5) 4.16 (out of 5)

However, as it turned out from meetings with the expert panel, no surveys were conducted among part time students . Therefore, the data in the table above can not reflect the real picture. The same meetings revealed that there were no points in the student surveys on the functions of the External Relations Department, Student Affairs and Career Center, International Cooperation Department, and Ethics Committee.

CONSIDERATIONS: ShUT focuses on quality infrastructure, classroom and laboratory conditions in its strategic plan, but the university's resource base and investments do not yet allow for an up-to-date resource base for each academic program. There are no appropriate stands, training equipment, testing equipment, appropriate methodological provision, modern literature, digitalization of literature for the implementation of practical and laboratory work of a number of academic programes, which may hinder the achievement of the outcomes of the academic programs and their sufficient implementation.

The academic program specifications do not emphasize the required and existing resource base in the relevant curriculum, which does not allow for continuous planning to improve their quality implementation.

The allocation of funds according to the goals of the strategic plan is not clear in the university budget, which does not contribute to the implementation of the goals of the SP.

The expert panel values the existence of laboratories of water problems and drip irrigation laboratories together with the Institute of Water Problems, agricultural-experimental land, newly built livestock and poultry farms of Sarushen training base, Khnapat "Pedigree Station", but it is also necessary to closely connect the activity of those bodies with educational process and to create on spot relevant conditions for quality implementation of educational process.

The university does not have an electronic document circulation system, it does not have policies and procedures for managing information processes.

The expert panel values the existence of an infirmary, a security system, and a dormitory at the university, but it is necessary to have a gym, a sports ground, and the necessary conditions for students with special needs.

The current mechanism for assessing the educational environment at ShUT is surveys conducted among students, which, however, are not regular and are not conducted among part time students. There are no mechanisms for assessing the applicability, availability and effectiveness of resources provided to internal stakeholders.

SUMMARY: Taking into consideration the fact that ShUT does not provide a clear, oriented distribution of the budget according to the goals of the strategic plan and educational programs, does not yet provide sufficient laboratory conditions and material and technical resources for the implementation of academic programs, there is no management policy for information and documentation , no assessment mechanisms for applicability, accessibility and effectiveness of resources provided to internal stakeholders , the expert panel concludes that ShUT does not have the necessary resources to create a sufficient learning environment to achieve strategic goals.

CONCLUSION: The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 7 as **unsatisfactory**.

VIII. SOCIETAL RESPONSIBILITY

CRITERION: The Institution 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

8.1 The Institution has clear policy on accountability.

The accountability process in ShUT is regulated by the university charter, and the regulations of its structural subdivisions. The principle of hierarchical accountability applies here.

According to the current procedure of accountability, each lecturer submits his / her report on the performance of planned educational process, which is discussed at the chair meeting. On the basis of the lecturers' reports, the report of the chairs is formed, then the report of the faculties, etc. Finally, the rector's report is based on the reports of all departments.

The head reports to the chair and to the scientific council of the faculty on the educational works and publications carried out in the chair.

The Dean reports to the Faculty Council and the Scientific Council of the University on the implementation of the annual work plan of the Faculty Council.

The annual report of the Rector is heard in the Scientific Council of the University, then it is submitted to the Board of Trustees for approval. After the Board of Trustees approves the annual report, it is published on the ShUT website to make it accessible to all stakeholders.

In order to evaluate the effectiveness of the activities and performance of ShUT, to identify its strengths and weaknesses, the University in   conducted an assessment of key indicators of activity (KIA) for 2016-2018, analyzing a number of areas: admissions and staffing, educational process, resources and management, infrastructure, science and innovation, external relations and internationalization.

8.2 The Institution ensures transparency of its procedures and processes and makes them publicly available.

ShUT considers its official website to be one of the most available and important means of covering its activities and ensuring transparency, which has been operating since February 2, 2016.

All information on the activities, regulations, procedures, guidelines, news, announcements, reports, events organized by the University is covered by the official shushitech.am website.

It is planned to publish the information on the website of ShUT in Russian, English and French. However, not all news are translated and posted in the relevant sections. Sometimes relatively old news and information is stored on the home page.

The activities, news and events related to the academy are also presented on the social platforms of Facebook, Twitter, Linkedin, Youtube.

8.3 The Institution has sustainable feedback mechanisms for establishing contacts with society.

The Publishing, Media and Public Relations Department is engaged in the development of public relations at ShUT. The University's policy in the field of public relations, its goals, objectives and implementation mechanisms are being developed.

As a feedback mechanism, there are surveys conducted among employers, students and graduates of ShUT. In addition, it is possible to organize or ensure participation in various university and state events, regular visits to border and resettled communities, military units, educational and production organizations, etc.

Forming feedback with the public in ShUT is maintained through personal, university-graduate and university-employer contacts.

The university also uses the opportunity to leave comments on social media as a feedback mechanism.

The university finds that the feedback mechanisms with the society are developing slowly, they are currently in the process of formation.

8.4 The Institution has mechanisms that ensure knowledge (value) transfer to the society.

One of the main statutory goals of the BSEC is the dissemination of knowledge in the society, raising its educational, scientific and cultural level. And the strategic development plan of the University defines a number of issues, the ultimate goal of which is to contribute to the intellectual, educational, economic and scientific progress of the society.

In order to strengthen the connection with the secondary schools, a series of online lectures were organized with the participation of the leading lecturers of the University.

The University, as a scientific-educational institution, has its contribution to the organization of scientific, cultural and public life of the Artsakh Republic. This is evidenced by the organization of and participation in various events, in particular, the organization of conferences, intellectual games, exhibitions, literary-artistic, musical events. The university also offers preparatory and training courses.

The events and exhibitions organized by the university are also valued. In addition, information related to the activities of ShUT is covered by local and public media outlets and television. Regular visits to border and resettled communities, military units, educational and production organizations are also carried out.

CONSIDERATIONS: The expert group positively assesses that there are existing accountability mechanisms in ShUT from the bottom ups up to the Rector of the University, the Scientific Council, then the Board of Trustees, which encompass many areas of the University and are regular. The outcomes of the subdivisions are summarized in various reports. At the same time, the expert panel finds that the lack of qualitative analysis in some of the reports cannot contribute to the further improvement of the university. This is due to the fact that the reports do not emphasize the degree of implementation of the objectives of the SP or the reasons for their non-implementation, as well as the planning of further improvement measures.

Taking into account that all the information on the activities, regulations, procedures, news, announcements of ShUT is covered both on the official website of the institution and on a number of social platforms, the expert panel finds that the procedures at the university are transparent and accessible to the public. In addition, the university tries to make its activities public through various media outlets, newspapers, publications, exhibitions, which also contributes to the transparency of the main processes of ShUT.

Although having inquiries as a feedback mechanism with the public is valued, it is also necessary to activate the frequent holding of round tables and discussions. It is also necessary to create different mechanisms for the transfer of knowledge to the society, to implement comprehensive processes of providing additional education.

SUMMARY: Taking into consideration the fact that the university has an accountability system, which partially identifies the problems at the university, there are platforms to make the processes accessible to the public, there is feedback to facilitate public relations, there are some mechanisms for transferring knowledge to the public, the expert panel concludes that the university is sufficiently accountable to the public.

Conclusion: The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 8 as **satisfactory**.

IX. EXTERNAL RELATIONS AND INTERNATIONALISATION

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

FINDINGS

9.1The Institution promotes its external relations through sound policies and procedures aimed at creating an environment conducive to experience exchange and enhancement and internationalization.

Despite the country's political isolation in the international arena, ShUT treats internationalisation as one of its strategic priorities. According to the Mission, education has to be consistent with international standards and the strategic plan announces the preparation of a policy developing *"external relations and internationalization as well as research internationalisation"*. To achieve this objective, the following steps are to be taken: inclusion of the University in international programs, promoting student and staff participation in scientific conferences, organising international conferences and language training and the provision of a website in three languages. SAR extends the scope of the internationalisation policy by listing such objectives as: *"increasing the reputation of the University abroad, harmonization of professional educational programs and training plans operating in our university and in leading foreign universities, ensuring the mobility of students and teaching staff from Artsakh to abroad and vice versa, engaging staff in international education processes, and making the University a regional learning centre for students arriving from abroad".*

The undertaken initiatives are generally in compliance with those statements. 10 cooperation agreements with foreign partners have been concluded, students and staff present the results of their research at scientific conferences (for example in Bulgaria, Czechia and Poland), foreign lecturers are invited to the University and the website is provided in 3 languages: English, French and Russian. The University publishes an English-language bulletin entitled "Bulletin of high technologies" where most articles are published by foreign authors. ShUT researchers publish their work in international journals. The higher education institution is a member of the International Association of Construction and Engineering Universities. The study programs have undergone benchmarking in relation to Armenian and Russian HEIs.

The actual achievements in internationalisation policy are quite low. No internationalisation policy and no appropriate procedures have been developed so far. In SWOT analysis SAR self-critically admits that the University does not have a strategy of internationalization and development of contacts with national partners. In particular, no procedures of promoting internationalisation among students and staff have been introduced. As few as 4 students have participated in exchange with Armenian HEIs and 13 students was on the internship at the Yerevan National Agrarian University.The University does not participate in international research and exchange programs. 6 candidates from India were undergoing language preparation to be able to pass ShUT's entry examinations and start education in Armenian, however they did not obtain visas.

9.2 The Institution's external relations infrastructure ensures regulated process.

So far, no appropriate internal regulations and procedures facilitating the development of international cooperation have been produced. Only in Appendix 3.13 to SAR regulations of academic mobility of the ShUT's students are presented.

No University's committee dealing with external relations has been appointed. In April 2019 the Centre of External Relations, Student Affairs and Career was created. This Centre was supposed to get involved in internationalisation and the development of external relations. However, on October 1, the Department of External Relations and International Cooperation was separated from it. For the

time being the unit employs one person. More people are planned to be employed. The job responsibilities of the head of the Department contain 13 tasks, including planning cooperation with foreign and domestic partners as well as ongoing support for students and employees traveling abroad, organization of conferences, informing students and staff about grants, scholarships and exchange programs. The Department is to support academic staff in preparing papers intended for publications in foreign scientific journals, however this service is not offered as yet. The Centre does not have its action plan and its own budget. The role of this unit has not been clarified enough. No funds were allocated in the ShUT budget for the implementation of the internationalization plans. There are future plans to explore foreign experiences in the organisation of infrastructure supporting the internationalisation process.

So far, no framework and procedures or supporting structures have been developed to foster cooperation with national and local partners.

9.3 The Institution effectively collaborates with local and international counterparts.

SAR lists 10 signed agreements with foreign partners but gives the names of only a few of them. The Kazan State University of Architecture and Construction is one of them but there is no information what that cooperation involves. One student had his internship in a Lebanon company called "Gardenia Grain d'or". 13 veterinary students have been trained at the National Agrarian University of Armenia. It is worth noting that student students and employees going abroad, after returning, prepare reports in which they share their acquired experience

The University is much more active in terms of organising and participating in international conferences and training. Among other things, students each year participate with presentations in annual conferences organised by the Polish University of Technology in Czestochowa, Poland. Lecturers participate in conferences in Prague, Sofia and Petrozavodsk. SAR also lists domestic conferences with the participation of students and employees of the University. Students also participate in occasional lectures offered by international and domestic visitors, for example from USA, UK, Russia, PUM - a Dutch organisation of employers, and the Yerevan State University.

SAR, and above all the information provided by stakeholders during the visits, shows that the University is actively developing cooperation with employers. Many of them are provide lectures. A memorandum with the Republican Union of Employers of Armenia has been signed. ShUT cooperates with the National Bureau of Expertise of the RA and the National Institute of Standards of the RA Ministry of Economy, local self-government however, SAR is scant about concrete forms of this cooperation. The review team has been informed about obtaining a grant on solar energy from the Republic by researchers from physic lab.

9.4 The Institution ensures internal stakeholders' appropriate level of a foreign language to enhance efficiency of internationalization.

SAR provides data which shows that 77% of lecturers speak Russian, 13% - English and 2% - French. Most of the administrative staff speak Russian but as little as 2% say they can speak English. According to the same source, over 72% of BA students can speak a foreign language but it is not known which one. SAR states that English language training is provided and that there are plans to set up a centre for teaching that language. However, this centre started its activities on 1 October 2019. There are no analyses of the effectiveness of language teaching and the reasons for the unsatisfactory level of English skills have not been looked into. The Department of Economics and Management conducts some classes in English, and also organizes film shows in this language.

CONSIDERATIONS: There is no doubt that the University leadership is committed and determined to develop cooperation with foreign partners. During the talks with students and teachers, they expressed great interest in participating in exchange programs and classes provided by visiting professors. The first initiatives were also taken to implement the strategic plan in this area. The initiatives that have been taken so far are not of a systematic and regulated nature. Therefore, it is clear from the above that the degree of progress in the implementation of strategic goals relating to

internationalisation is small. The visibility of ShUT in the international arena is still poor. The review team is aware that this is largely due to the lack of political recognition of the Artsakh republic and isolation on the international arena and, consequently, the reluctance of foreign partners to establish contacts.

However, it is also possible to point to the internal causes of insufficient progress in this sphere. The first is the lack of a clear definition of the functions that internationalization is to perform in the development of the university, i.e. the answer to the question why it should serve, what are the expecting outcomes and what impact will have on all university processes. It is interesting observation, that University strategy does not clearly links internationalization with quality assurance goals. One of the consequences of this ambiguity is the formulation of strategic goals, which in fact are not feasible under existing conditions over a period of several years. The Strategic Plan promises to stimulate external relations and internationalization, but so far no mechanisms have been presented to implement this goal. It is also difficult to assess strategic goals in this area because they were not assigned the key performance indicators.

The political barriers can explain the University's non-participation in European mobility programs such as Erasmus+. It seems, however, that student and staff exchange under already signed bilateral agreements has not been given enough attention. Former Soviet universities seem a natural partner, if only for the fact that Russian is commonly spoken by students and staff. SAR indicates that there is potential to cooperate with countries not recognised in the international arena. So far, the second strategic objective - research internationalisation - has not been implemented. The University does not participate in international research projects, and although its employees publish their work in foreign journals, however, the journals do not include those cited by international bibliographical databases like the Web of Science. There is no system of incentives to enter into scientific cooperation with foreign partners and publish work in good peer review scientific journals. Students' awareness of the possibility of participating in international initiatives, demonstrated during the meetings with the review team is rather low.

The policy of internationalisation at home is a great opportunity, but has not been developed more actively to include inviting visiting professors from the Armenian diaspora or the participation of students in online lectures. A brief review of syllabi sample revealed that they are not enriched with intercultural and global values, and literature in English is rarely recommended. The opportunity of cooperation with domestic and Armenian HEIs has not been taken advantage of. During the meeting with the review team employers admitted, that they were more active in providing new initiatives of collaborations than the University representatives. No alliances with local universities resulting in joint studies or research programs are foreseen. The university should make greater use of its cooperation with local representations of international / foreign companies.

The University has no appropriate institutional basis to support the development of international relations. The Department of External Relations and International Cooperation as well as Department of Student Affairs and Career are in the early stage of self-organisation, the latter will be separated on 1st December. As it was mentioned no academic body is responsible for articulation of internationalisation policy. The teaching and research infrastructure is underdeveloped. The full implementation of the internationalisationprogram requires considerable financial support, however no budget was planned for external relations.

SUMMERY: The past initiatives opening up the University to international cooperation must be appreciated in light of the current political limitations and the military situation in the region. However, those efforts are woefully inadequate to integrate the University with the network of international HEIs. ShUT still remains a regionally oriented university, not internationally visible. The lack of appropriate policy and procedures as well as passiveness in the development of internationalisation at home, and in developing cooperation with local and Armenian universities, and industry and business partners is quite a disappointment. System providing effective support to

students and staff improving their language competencies is missing. Summing up: in the review team's opinion the external relations practices do not sufficiently enhance University processes.

CONCLUSION: The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 8 as **unsatisfactory**.

X. INTERNAL QUALITY ASSURANCE SYSTEM

CRITERION: The Institution has an internal quality assurance system, which promotes establishment of a quality culture and continuous improvement of all the processes of the Institution.

FINDINGS

10.1 The Institution has quality assurance policies and procedures.

Goal 1 of ShUT 2016-2021 SP (Quality Education), in particular Objective 4, focuses on the introduction of an internal quality assurance system.

The quality assurance system, as such, is in the process of being developed in ShUT.

The policy of ShUT in the field of quality assurance was approved at the April 30, 2019 session of the Scientific Council.

The policy presents the "concept of quality" at the University, the principles of quality assurance, the goal of the policy and the main issues, the approval of the internal quality assurance policy and the changes made in it. The document envisages the active participation of external and internal stakeholders in the quality assurance process, the monitoring of university processes, IQA system by regular revisions, and the improvement of all university processes.

There is a policy on internal quality assurance at the university, but the mechanisms for its implementation are very limited, from procedures mainly surveys are used , and there is no analysis of the effectiveness of policy implementation. In the main document, monitoring is considered as an important and key mechanism, but the ways of its implementation are not specified.

Surveys are again used as a mechanism for identifying the needs and satisfaction of internal and external stakeholders.The Quality Assurance Manual has not yet been developed at ShUT.

The work plan of the University IQA department was approved in 2019, but it is not implemented yet. The head of the department was not aware of its existence. There is nothing mentioned in the self-assessment about the existence of a work plan either.

10.2 The Institution allocates sufficient material, human and financial resources to manage internal quality assurance processes.

The IQA department in ShUT has been reorganized since 2019. Prior to that, it was a department of "Educational Programs, Quality Assurance, Audit and Internship". The department currently has only two staff positions. There are no offices equipped with the necessary technical resources, and there are no allocations in the budget of ShUT to finance quality assurance processes.

Job functions and responsibilities of the department employees are not fixed, there are no job descriptions. In addition, assessment of the performance of the department staff and identification of needs are not carried out.

There are no annual reports on the results of the processes carried out by the IQA department at the university, the effectiveness of the department is not evaluated.

Since March, 2019 a Standing Committee on Quality Management under the Scientific Council has been functioning in ShUT. It consists of 21 members. The Committee includes external and internal stakeholders. The Quality Management Committee is guided by the regulation approved by the decision of the Scientific Council of May 23, 2019, which stipulates the purpose of the Committee, the main tasks and functions of the Committee, the organization of work. But so far the Committee has held only two sessions.

In 2019, in order to effectively implement the internal quality assurance processes of the University, six employees of different departments were sent to participate in ANQA trainings.

10.3 The internal and external stakeholders are involved in quality assurance processes.

Point 7 of the Quality Assurance Principles in ShUT Quality Assurance Policy document, the BSEC focuses on "enhanced participation of faculty and staff in QA and improvement processes ..." and paragraph 8 highlights "full participation of students, graduates and employers in QA processes". However, on the other hand, as part of the QA process, the same point only mentions surveys: student surveys on effectiveness of teaching, university graduate surveys on satisfaction, of education received from the University, surveys on employer satisfaction of graduates. This approach was confirmed during the meetings of expert panel, students and employers . During the meetings with the representatives of the academic staff, it was also not presented how the teaching staff is involved in the quality assurance processes. Within the framework of the expert site visit during meetings with the students, it became clear that the students studying in the correspondence department did not participate in the surveys, and the students of the full-time system did participate in many surveys, but were not informed about the results.

In the principles of quality assurance, ShUT also focuses on the participation of external and internal stakeholders in the self-assessment processes of educational programs. At the moment, ShUT has no bachelor's degree graduates, but self-evaluation of the master's programs has not yet been carried out in ShUT.

The expert panel highlights the existence of a quality management committee, and the involvement of external and internal stakeholders in it. However, the committee has had only two discussions so far, the first of which approved the committee's regulations.

As presented in the self-assessment and revealed by the meetings between the IQA Department and Quality Management Committee, stakeholder engagement effectiveness analyses have not yet been conducted in ShUT, as quality assurance mechanisms have just been introduced.

Students participate in quality assurance processes as representatives of student self-governing bodies, in addition to being included in the Scientific Council of the University. Internal stakeholders were included in the self-evaluation working group.

10.4 The internal quality assurance system is periodically reviewed.

ShUT states in the 5th point of the principles of quality assurance of the document related to the Quality Assurance Policy that "The QA system is aimed at promoting the processes of continuous quality improvement at the university. "Self-assessment is seen as a potential tool for improving the quality of university education. Surveys of students, graduates and employers are seen as important mechanisms for continuous quality improvement."

The policy, procedures, and mechanisms for reviewing the internal quality assurance system are still lacking in ShUT. Consequently, assessment and analysis of the effectiveness of the regular review mechanisms of the internal quality assurance system could not be implemented. The university interprets this as a consequence of being a young university.

In the case of many processes, ShUT is still in the planning stage of the PIEI cycle, and the processes did not pass on to the stages of implementation, evaluation and improvement.

The university has adopted many regulatory documents and structures, which, however, have not yet completed the internal quality assurance system. There are no indicators for evaluating the efficiency of the activities of the subdivisions, there is no self-assessment of the activities of the bodies and no analysis using quantitative and qualitative methods, there is even no self-assessment of the activities of the IQA department.

10.5 The internal quality assurance system provides valid and sufficient grounds for the external quality assurance processes.

In its Quality Assurance Policy document, ShUT stated, among other principles, that the key principle of quality assurance policy is the interrelation between internal and external quality assurance processes. In developing the self-evaluation report, the working group used as a guideline the form of the self-evaluation report developed by the National Center for Quality Assurance in Vocational Education, with its respective criteria and standards. The information collected in the

quality assurance and educational-scientific departments of the University and the documents approved by the Scientific Council were used.

The activities of the quality assurance system should have facilitated the external evaluation of the quality assurance through the appropriate documentation base, developed mechanisms , regular assessment of the effectiveness of the procedures, and monitoring. However, the only document coordinated by the QA department used during the development of self-evaluation is the key evaluation indicators for 2016-2018. for. On the other hand, the document prepared by the self-evaluation working group mainly allows for the implementation of the external assessment process.

10.6 The internal quality assurance system ensures the transparency of the processes at the Institution providing valid and up to date information on their quality to the internal and external stakeholders.

In its Quality Assurance Policy Document, ShUT focuses on the active participation of stakeholders in promoting a transparent, accountable culture of quality improvement.

However, according to the self-evaluation report, the expert panel was later not provided with sufficient information on how the QA department ensures the transparency of the quality assurance system, what analyses are carried out, and whether they are provided to the university's internal and external stakeholders. The QA section of the university's official website presents only the key indicators of assessment, self-evaluation and quality assurance policy. The site lacks the work plan of the QA department, reports on the work done by the department, analytical reports, which would allow to adequately assess the current state of the internal quality assurance system and to have the necessary information about the relevant processes.

CONSIDERATIONS: There is a policy on internal quality assurance at the university, but the mechanisms and procedures for its implementation are very limited, which means that the principles of internal quality assurance have not been translated into specific processes. The internal quality assurance system is in the process of development, its functions are not yet sufficiently integrated with the work of other intra-university departments. Work planning is documented, but not actually implemented.

The expert panel is concerned that the QA department is not provided with human, material and technical resources for the implementation of the work, which does not allow the latter to work with quality and jeopardizes the process of continuous improvement of the university. The QA department does not carry out self-assessment of its activities, does not analyze the more or less collected information, does not ensure the active participation of internal and external stakeholders in quality assurance processes. Meanwhile, the active participation of external and internal stakeholders would contribute to the development of sustainable quality assurance mechanisms and the introduction of a quality culture.

The quality assurance processes in ShUT are mainly in the planning stage of the PIEI cycle, they have not yet entered the stages of implementation, evaluation and improvement, which endangers the sustainability of the university development.

The expert panel also finds that the lack of analysis of various processes, evaluations of the effectiveness of their implementation, and reports by the Quality Assurance Department at ShUT do not ensure the transparency of information on the quality of university processes for internal and external stakeholders.

SUMMARY: Taking into consideration the fact that the quality assurance principles and approaches published by ShUT have not turned into concrete processes, the internal quality assurance system is not sufficiently integrated into the work of the departments, the participation of internal and external stakeholders in quality assurance processes is not tangible for the processes implemented at the university, including the processes of quality assurance and the evaluation and improvement stages of PIEI cycle not being implemented, the QA department does not provide sufficient

information to stakeholders on the quality of the university's processes, the expert panel concludes that ShUT does not meet the requirements of Criterion 10.

Conclusion: The expert panel assesses the compliance of the institutional capacities of the NKR ShUT with the requirements of CRITERION 10 as **unsatisfactory**.

EVALUATION ACCORDING TO ACCREDITATION CRITERIA

CRITERION	*CONCLUSION*
1. Mission and Purposes	Satisfactory
2. Governance and Administration	Satisfactory
3.Academic programs	Satisfactory
4. Students	Satisfactory
5.Faculty and staff	Satisfactory
6. Research and Development	Unsatisfactory
7. Infrastructure and Resources	Unsatisfactory
8.Societal Responsibility	Satisfactory
9. External Relations and Internationalization	Unsatisfactory
10. Internal Quality Assurance System	Unsatisfactory

Gegham Karoyan

Signature of the Chair of Expert Panel

Gegham Karoyan - In 2002 he graduated from SEUA Faculty of Cybernetics, in 2004 he completed his master's degree program. In 2008 he received the degree of PhD in Technical Sciences, in 2013 the title of Associate Professor. He started his career in 2003 at the Chair of "Electronic Technology" of SEUA Faculty of Cybernetics as a senior assistant. In 2011-2013 he was the Deputy Dean of the Faculty of Cybernetics for scientific affairs. Since 2013 he has been an associate professor at the Chair of Electronic Technology. From 2017 to present, he is the Deputy Director for Education at the Institute of Information Communication Technologies and Electronics. Since 2017 he has been a member of the (E 09.01) Professional Council in 038-Electrical Technology. He is an author of 25 scientific articles, 2 patents, 8 methodological and laboratory works. Participated in the ANQA expert panels in the accreditation processes of the Public Administration Academy of RA and the Military Aviation University under the RA Ministry of Defense.

MstislavSocha graduated from the University of Lodz (Poland) in 1969 receiving an MA degree in Economics, completing his PhD at Warsaw University of Economics in 1974. Mr. Socha became a Doctor of Science at the University of Warsaw in 2000. He is currently teaching at the University of Warsaw, at the Leon Kozminski Academy, at the Northern State University, at the European College, at the School of State Administration.He has been amember of the Advisory Board of the Polish Accreditation Committee since 2014 and since 2017 has been a member of the International Advisory Board of the Hungarian Accreditation Committee. Mr. Socha has been an expert in the Polish Accreditation Committee for higher education since 2002 and a member of the Financial Committee of the European Consortium Accreditation (ECA) of higher education since 2014. He has participated in numerous research programs, national and international courses and conferences. Socha is an author and co-author of over 120 scientific papers (books and articles) and more than 40 conference reports published in a number of local and foreign magazines.

Tsaghik Hovhannisyan - In 2001 she entered and in 2005 she graduated with honors from the Department of Computer Systems and Informatics of the State Engineering University of Armenia, receiving a bachelor's degree in engineering specializing in "Computing machines, complexes and networks". In 2007 she graduated from the Faculty of Computer Systems and Informatics of the State Engineering University of Armenia, receiving a master's degree in "Informatics and Computer Systems". She lectured at the Chair of Computer Systems and Networks of SEUA Faculty of Computer Systems and Informatics. In 2017 she completed postgraduate studies, defended her dissertation and received the degree of PhD in Technical Sciences. Since October 2017 she has been holding the position of Scientific Secretary of the Institute of Information and Telecommunication Technologies and Electronics of ANAU, and since 2018 she has been holding the position of Associate Professor at the Chair of Computer Systems and Networks in the ICTE Institute. She is an author of about 20 scientific and methodological publications. She has participated in expert training courses organized by ANQA.

Hasmik Minasyan - In 1997 graduated from the Department of Chemistry and Biology of the Faculty of Medicine and Biology of Artsakh State University. In 2002 she completed the postgraduate studies. She has been a PhD in Biological Sciences majoring in Biophysics since 2007, an Associate Professor since 2011. She has been a lecturer at the Chair of Biology of Artsakh State University since 2011, and an associate professor at the same chair since 2012. The courses taught are Biophysics and

Radiobiology. Since 2012 she has been the head of the Quality Assurance Center of Artsakh State University. She participated in the trainings on implementation and development of the Internal Quality Assurance System organized by ANQA, as well as trainings preparing experts.

Ala Avagyan - In 2018, she entered the Department of Bread, Confectionery and Macaroni Production Technology of the Faculty of Food Product Technologies of the National Agrarian University of Armenia. Since 2018, she has participated in the trainings of the student experts of the "Student Voice" project of the ANQA and she has been involved in the processes implemented by the center to date.

APPENDIX 2. SCHEDULE OF THE SITE-VISIT

11.11.2019 -14.11.2019

	11.11.2019	Start	Finish	Duration
1.	Meeting with the University Rector	09:30	10:15	45 mins
2.	Meeting with the Vice Rector, Deputy Rectors	10:30	11:15	45 mins
3.	Meeting with the SAR working group representatives (10-12 participants)	11:30	12:15	45 mins
4.	Break, panel discussions	12:30	13:20	50 mins
5.	Meeting with Board of Trustees representatives	13:30	14:15	45 mins
6.	Meeting with employers	14:30	15:15	45 mins
7.	Meeting with graduates (10-12 graduates)	15:30	16:15	45mins
8.	Document review and closed panel meeting	16:30	18:00	90 mins

	12.11.2019	Start	Finish	Duration
1.	Meeting with Faculty Deans	09:30	10:15	45mins
2.	Meeting with Heads of Chairs	10:30	11:15	45mins
3.	Meeting with academic staff representatives (10-12 lecturers)	11:30	12:15	45mins
4.	Visiting Faculties, document review	12:30	13:30	60 mins
5.	Break, panel discussions	13:40	14:30	50 mins
6.	Visiting Chairs, document review	14:45	15:45	60 mins
7.	Meeting with Heads of Subdivisions /Career Center, Department of International Cooperation, Committee on Ethics, Committee on Fighting Corruption Risks, etc./	16:00	16:45	45mins
8.	Document review and closed panel meeting	17:00	18:00	60 mins

	13.11.2019	Start	Finish	Duration
1.	Meeting with BA students/full-time, part-time/(10-12 ppl)	09:30	10:15	45 mins
2.	Meeting with MA students/full-time, part-time/(10-12 ppl)	10:30	11:15	45 mins
3.	Meeting with Student Council and Student Scientific Association representatives (8-10 ppl)	11:30	12:15	45 mins
4.	Meeting with the Heads of the Research and Scientific-Educational Center, Research Laboratories and Databases	12:30	13:15	45 mins
4.	Break, panel discussions	13:30	14:20	50 mins
5.	Resources review	14:00	16:15	135 mins
6.	Document review and closed panel meeting	16:30	18:00	90 mins

	14.11.2019	Start	Finish	Duration
1.	Meeting with the staff chosen by the expert panel	09:30	10:15	45 mins
2.	Open meetings with the expert panel	10:30	11:15	45mins

3.	Document review and closed panel meeting	11:30	13:00	90 mins
4.	Break, panel discussions	13:00	13:50	50 mins
5.	Document review and closed panel meeting	14:00	14:45	45mins
6.	Final meeting with the university management	15:00	15:30	30 mins

APPENDIX 3. LIST OF DOCUMENTS OBSERVED

N	Name of the Document	Criterion/ Standard
1.	The composition of the Strategic Plan Development Group approved by the Rector	1.1
2.	Strategic plan development procedure	1.1
3.	Reports of departments	1.2
4.	Faculty strategic plans, working plans and reports	2.2
5.	Chair strategic plans, working plans and reports	2.2
6.	Joint regulation on the accountability of structural departments	2.2
7.	Orders on creating working groups to develop academic programs	3.1
8.	Analysis of labor market demands for the compliance of learning outcomes of academic programs	3.1
9.	Minutes and reports of examination committees for academic programs	3.1
10.	Methodology and manual on credit distribution	3.1
11.	Regulations on preparing and defending course papers, as well as selecting, preparing and defending graduation papers and master's theses	3.3
12.	Regulation on appealing grades	3.3
13.	Graduation papers, master's theses	3.3
14.	Requirements presented to master's theses and grading criteria	3.3
15.	Minutes and analyses of qualification awarding committees	3.3
16.	Agreements ensuring exchange and mobility of students and lecturers	3.4
17.	Bases for academic program monitoring, inprovements and expert opinions	3.5
18.	Minutes and reports round table discussions of employers, graduates and lecturers	3.5
19.	Admission committee report concerning admission and QA Center analyses on reports of admissions / of the last 5 years/	4.1
20.	Schedule of educational counsellings and additional classes; registers	4.3
21.	Regulation of students applying to administrative staff	4.4

22.	Diaries of scientific-research internships	4.5
23.	Scientific reports, works and articles of students	4.5
24.	Student manual	4.6
25.	Lecturers' reports, assessment on implementation of individual work plans of lecturers	5.3
26.	List of participants of staff trips, measures for improvement after the visit	5.4
27.	Policies and procedures of encouraging and ensuring professional promotion of new lecturers	5.6
28.	Examples of scientific-methodological reference	5.6
29.	Position passports of administrative staff	5.7
30.	Position passports of Teaching and support staff	5.7
31.	Reports of research and scientific-educational center and educational-scientific laboratories /2017-2019/	6.1
32.	List of scientific publications in prioritized fields	6.1
33.	Annual scientific plans and reports of chais and departments	6.2
34.	Corpuses of scientific conferences	6.3
35.	Conventions and memorandums of international cooperation, bases for conducted scientific-research activities	6.4
36.	Bases for conducted collaborative research works of academic staff within the framework of associations	6.4
37.	Bases and analyses expressing the effectiveness of correlation between research activities and educational process	6.5
38.	Analyses on budget allocations for improvement of educational environment	7.2
39.	Regulation on providing scholarships	7.3
40.	Approved regulation on office management	7.5
41.	List of students with special needs in the educational institution	7.6
42.	Examples of rector's reports	8.1
43.	Reports on examination of public opinion	8.2
44.	Plan of actions aimed at internationalization	9.1
45.	Analyses on the effectiveness of teaching foreign languages	9.4

46.	Staff of the working group developing Quality Assurance Manual	10.1
47.	Position passports of employees of QA Department	10.2
48.	The approved staff of Quality Assurance Committee, minutes of sessions	10.2
49.	QA analyses on the effectiveness of focus groups, surveys and different processes	10.3
50.	Examples of diplomas	
51.	Examples of diploma appendices	

APPENDIX 4. RESOURCES OBSERVED

1. Classrooms
2. Computer Classrooms
3. Classrooms equipped with facilities for on-line classes
4. Deans Offices
5. Chairs
6. Library
7. Meeting Hall
8. Laboratories /schematics, physics, natural technologies, programming, chemistry, etc./
9. Experimental Workshop
10. Quality Assurance Department
11. Canteen
12. Pedigree Station of Khnapat

APPENDIX 5. LIST OF ABBREVIATIONS

1. HEI- Higher Educational Institution
2. EHEA- European Higher Education Area
3. SAR- Self-Assessment Report
4. NKR-Nagorno Karabakh Republic
5. AC- Academic Program
6. TLI- Tertiary Level Institution
7. ShUT- Shushi University of Technology
8. QA- Quality Assuarance
9. ANQA -National Center for Professional Education Quality Assurance Foundation
10. QAD – Quality Assurance Department
11. ESG – European Standards and Guidelines
12. NQF - National Qualifications Framework
13. QMC- Quality Management Committee
14. IQA- Internal Quality Assurance
15. AS- Academic Staff
16. PDCA - plan, do, check, apply
17. SP- Strategic Plan
18. SSA- Student Scientific Association
19. SC- Student Council