



Certification report

ASIIN Institutional Accreditation

**International Information Technology University
Kazakhstan**

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Table of Content

Executive Summary	4
A. About the Certification Process.....	7
B. Characteristics of the International Information Technology University Kazakhstan	10
C. Analysis and Findings of Peers	11
I. Definition of quality	11
Criterion I.1: Objectives	11
Criterion I.2: (Quality-) Management systems / Governance	13
II. Educational Programmes / Courses / Trainings	17
Criterion II.1: Creation and development of programmes / courses / trainings	17
Criterion II.2: Implementation of programmes / courses / trainings.....	19
Criterion II.3: Cooperations.....	22
Criterion II.4: Examination systems and organisation of exams	25
Criterion II.5: Recognition of achievements	27
Criterion II.6: Assistance and support.....	30
III. Management of resources.....	33
Criterion III.1: Material and human resources.....	33
Criterion III.2: Human resources development.....	36
Criterion III.3: Interaction with research.....	39
Criterion III.4: Interaction with administration	41
IV. Transparency and documentation	44
Criterion IV.1: Rules and regulations for programmes / courses / trainings.....	44
Criterion IV.2: Documentation	47
D. Evidences provided by IITU	49
E. Comment of the Higher Education Institution (27.12.2017)	51
F. Summary: Peer Recommendations (31.01.2017).....	52
G. Decision of the Accreditation Committee (14.02.2017)	58
H. List of participants	60
I. List of teachers for Interview	60
II. List of students.....	63
III. List of employers.....	64

Abbreviations:

AS – Academic staff
AUTOCAD - commercial software application for 2D and 3D computer-aided design (CAD)
BSC - balanced scorecard
CAD - computer-aided design
CD – Commercial department
CISCO - an American multinational corporation technology company (www.cisco.com)
CSI - Committee of Science and Innovations of IITU
CSSE – Computer Science and Software Engineering
DL – Distant learning (site)
DMAA - Department of Methodological and Academic Affairs of IITU
ECCUM - Establishment of Computing Centers and Curriculum Development Master Program
EXPO-2017 –International Exposition, 2017 in Astana, Kazakhstan.
GOSO - the State Educational Standard of Kazakhstan
H-index – Hirsch index, Impact factor
IITU – International Information Technology University (www.iitu.kz)
INTC - Innovation Technical College (by IITU)
IS – Information systems
KABIS – The Kazakh Automated Library and Information System developed by the Kazakh Soft company "Kazakh Soft"
KPI – Key Performance Indicator
LMS - the Learning Management System
MatLab - specific software for mathematical calculations
MES RK – the Ministry of Education and Science of the Republic of Kazakhstan
MSDNAA - Microsoft Developer Network
NATD – National Agency for Technological Development of RK (www.natd.gov.kz)
NERP 10 SAP ERP – business-service of SAP Company (www.sap.com)
NICH Zerde JSC - National Infocommunication Holding 'Zerde' (www.zerde.gov.kz)
NIT JSC - JSC National Information Technology of RK (www.nitec.kz)
OFD – Operations and Facilities Department
RET - Radioelectronics and Telecommunication
SAP - Platform and technology solutions software Company (www.sap.com)
SDP - Software Development Program (Learning Course of iCarnegie, USA)
SG- Students' government
SMC- Science and Methodology Council of IITU
SSD - Software Systems Development (Learning Course of iCarnegie, USA)
TERP-10 - Integration of Business Processes in SAP (www.sap.com)
TSD - Technical and IT-support Department of IITU
TuCAHEA - Towards a Central Asian Higher Education Area
TUP - the Standard Academic Program
UA - University administration
UMKD - Methodological Complex of Discipline
UMKS – Methodological Complex of Specialty
VRAA- Vice-Rector for Academic Affairs

Executive Summary

Overall, the major findings and respective recommendations are summarized as follows:

Regarding the criteria on “Definition of quality”

IITU defines on its website the vision, the mission and a number of strategic objectives. The strategic directions are broken down into more specific and manageable entities. The strategic goals have been reached to a large extent and the university intends to revise the strategic goals in the near future; the peers supported this envisaged revision procedure and underlined that research should also be a focal area as IITU wants to become a leading research university. For each of the strategic goals, IITU defined “Key Performance Indicators”; however, the peers pointed out that the Key Performance Indicators had not been applied systematically for all strategic goals which need to be improved. The peers stated that the vision of IITU is well communicated in the university community. Quality assurance procedures take place at all levels. The peers understood that IITU actively practices a culture of participation at all levels of the organization. Based on the program and course material provided by IITU, the peers could see that learning outcomes are defined at the program as well as the course level; however, the peers gained the impression that neither staff nor students are fully aware of learning outcomes. The peers underlined that learning outcomes should be made more transparent and recognizable to the stakeholders of the organization. IITU has a plausible organizational structure with responsibilities and clearly defined channels of communication. Feedback is given through interviews and a number of surveys. The peers also indicated that possible risks should be added to the evaluation tools and a separate Quality Assurance Unit should be introduced.

Regarding the criteria on “Educational programmes / courses / trainings”

The development of new programs is guided by the strategic dimensions and objectives, feedback from relevant stakeholder groups and the needs of the labor market. Input from stakeholders is systematically considered in order to adapt running programs and regular feedback loops with stakeholder groups are implemented. Even though in practical terms the creation of new programs is working well, the peers underlined that IITU needs to develop an official methodological guideline for the creation of programs to grant a systematic approach and to include external future developments. It remained unclear to the peers if and to what extent student organizations are involved and actively participate in this process. IITU promotes a culture of reflective discussion between staff members, students and external stakeholders like business partners, graduates and alumni; the relevant stakeholders praised the openness of the management and the lecturers to consider recommendations. However, within the departments in some cases the hierarchical patterns still seem to be the predominant organizational structure. The peers encouraged management to consult widely to better implement the culture of open communication at all levels of IITU. The peers praised the growing academic freedom of Universities in Kazakhstan (thanks to the changes in State Educational Standard of Kazakhstan (GOSO)); however, the peers were concerned that lecturers may keep offering the same elective courses. The peers recommended introducing incentive schemes to encourage staff members to

regularly update elective courses or introduce new ones reflecting new technological developments. IITU introduced a new policy of cooperation with foreign universities which requires a clear portfolio of planned activities and a contact person in charge before signing. Academic departments of IITU are redesigning their academic programs on a modular basis to allow foreign professors to teach IITU students (also online). IITU has developed a procedure to abolish inactive co-operations and to promote only co-operations that are actively implemented. Cooperation initiatives depend largely on individual staff members, and many co-operations commence in the context of international projects. Staff mobility is planned annually in the academic departments' plans and implemented accordingly. IITU lags behind in the implementation of its strategic goals of international mobility due to national currency devaluation and limited funds. The peers welcomed IITU's initiatives to foster international projects to overcome this funding issue and encouraged the University to further develop the identification of resources. IITU has transparent selection criteria and procedures in place to identify suitable candidates for international mobility; however, based on the subjective perception of the students, particularly the reasons for rejection of applications should be communicated more transparently to the respective students. The peers confirmed that the rules and regulations of examinations are clearly defined and staff members are aware of these rules and apply them. However, the peers underlined that the form of examination should focus on the competences of the student and needs to be in line with the intended learning outcomes of a module. The peers welcomed that in the new academic year all oral, written and computer test assignments will be revised regularly. PhD students are assigned to a domestic and a foreign supervisor to promote the internationalization of PhD students. The peers keep up their recommendation that Master and PhD students write the final theses in English to be further assessed by a foreign professor; given that the peers could not assess the quality of Master and PhD theses as most of them were only available in Russian or Kazakh they underlined that IITU should ensure that the final theses meet international standards and citation practices. The peers acknowledged that IITU follows the rules of recognition established by the Ministry of Education and Science of the Republic of Kazakhstan. Students are supposed to sign an "Agreement on academic mobility" before international mobility takes place. Given that students reported that the process of recognition was partly time-consuming, the peers encouraged IITU to analyze the procedure of recognition and identify potential bottlenecks that may lead to a prolongation of the process. The peers suggest that learning outcomes are considered in the process of recognition and that non-academic achievements should be taken into account. The peers confirmed that IITU provides a broad set of assistance and support services that cover the entire student life cycle. Especially the focus on employment opportunities through the "Career Fair" organized by IITU and the strong support of entrepreneurship to generate new and innovative business ideas was appreciated by the peers.

Regarding the criteria on "Management of resources"

When IITU was founded in 2009, a lot of new equipment was purchased in the following years and represented the state-of-the-art technology. The computer equipment is consistently checked and the overall situation is assessed annually. The peers learnt that additional resources are available that had not been mentioned in the self-assessment report or looked at during the onsite visit.

The peers recommended improving the ongoing investment into more up-to-date equipment to implement IITU's vision to be a leading IT university in the region. The peers acknowledged that IITU is in a testing phase to verify the benefit of access to internationally well-reputed e-journals; the peers highlighted that this access must be granted to staff members as well as to students. The peers recognised that IITU is annually audited by an independent financial auditor and the university provides a risk analysis in the framework of the audit. Thus, the peers agreed that IITU's risks are annually analyzed. The peers understood that a clear concept and responsibilities for human resource development are in place and that interested staff members can apply for participation; every staff member is supposed to partake in further training every five years. The organization and the budgetary support are decentralized on department level and staff members are actively involved in the planning. The University plans to conduct a series of seminars; the peers recommended that the further education and training should focus on learning outcomes, didactical and educational approaches in line with the intended learning outcomes, outcome-oriented testing and research activities. The peers learnt that IITU maintains a "University Committee on Academic Affairs and Disciplinary Control" which is meant to resolve conflict situations. The management of IITU underlined that scientific research is a priority of the university and every teacher is supposed to conduct research; however, the peers gained the impression that this transfer from research to teaching depended on the teacher. The peers emphasised that from their point of view a concept to combine teaching and research systematically should be further elaborated. IITU acknowledged that some kind of Research Department in the University organizational structure was needed. The peers recommended improving the English proficiency of staff members (including administrative) to be able to realize the vision of an international university.

Regarding the criteria on "Transparency and documentation",

The University website information is being currently updated; the peers suggested that the website needs to contain information about the university, its services and the different degree programs. The peers acknowledged that the Diplomas and Transcripts of Records provided information on the individual performance of students; however, the peers could not see that the qualification profile of the degree program is outlined, or that statistical data as set forth in the ECTS User's Guide is included, which would allow readers to categorize the individual result/degree. The Diploma Supplement and Transcript of Records need to be amended accordingly. IITU has a documentation system in place which manages all central documents and supports the processes of planning and implementing degree programs. However, there are sometimes significant delays in the provision of specific data to other units. IITU management highlighted this challenge itself and seeks a solution jointly with the heads of department. Particularly the data collected by the Quality management System provides the management of IITU with the information they need to adopt measures. The quality assurance and documentation system of IITU provides target-group specific information about the programs and their quality; two educational portals of the University maintain information about the learning process of each student for the entire life cycle.

A. About the Certification Process

Certification Subject	International Information Technology University Kazakhstan	
Experts	<p>Prof. Dr. Liz Bacon, University of Greenwich, UK;</p> <p>Aday Baisakalov, Freelance Consultation, Marketing Research;</p> <p>Prof. Dr. Christiane Fritze, University of Applied Sciences Munich, Germany;</p> <p>Prof. Dr. Norbert Grünwald, University of Applied Sciences of Wismar, Germany;</p> <p>Luka Giorgadze (student peer), Karaganda State University, Kazakhstan.</p>	
Representative of ASIIN Headquarter	Dr. Thomas Lichtenberg	
Timeline	Date	Milestone
	29.08.2016	Submission of the final version of the self-evaluation report of IITU
	25.-27.10.2016	Onsite visit of the peer group
	05.12.2016	Submission of Draft Report to IITU
	31.01.2017	Final version of Accreditation Report taking the feedback from IITU into account
	14.02.2017	Decision of the Accreditation Commission for institutional accreditation
Relevant criteria and sources	<p>Criteria for the ASIIN System Seal / Institutional Accreditation / Institutional Assessment: Requirements for Good Teaching and Successful Learning (20/06/2016)</p> <p>Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)</p>	

Description of the certification approach

ASIIN considers certification as an instrument for organizational development triggered by a two staged process of an internal evaluation followed by an audit of external peers. In the first stage members of the evaluated organisation are asked to implement an internal self-reflection process including relevant stakeholders leading to a self evaluation report (SER). This report states a shared internal understanding or at least the overview on internal views of/on strengths and weaknesses of the evaluated subject. ASIIN then combines an audit team representing suitable expertise concerning the evaluated subject, independency and a good match of the different stakeholder-perspectives engaged with or affected by the evaluated subject. This team reviews the SER and conducts a site visit at the institution, where the SER is validated in discussions with the relevant stakeholders. The findings are compiled in an certification report stating strengths and weaknesses from the external view and recommendations towards their enhancement.

In case of the certification of an internal quality management system for higher education institutions, the evaluation report and the site visit are structured with the help of the *Criteria for the ASIIN System Seal / Institutional Accreditation / Institutional Assessment*. Overall, this set of criteria is designed for quality development in teaching and learning. It refers to (I) the definition of quality and its management, (II) their application on the educational provisions the Higher Education Institution (HEI) is offering, (III) the management of its resources and (IV) quality related transparency and documentation. Each aspect is considered in an *institutional, procedural* and *cultural* perspective or dimension. The approach is based on a system of so-called maturity levels. This makes for a comprehensive description of the development stage at which the quality management system of the institution presently is. A simplified version of the maturity levels is presented as follows:

0 = non-existent

1 = defined

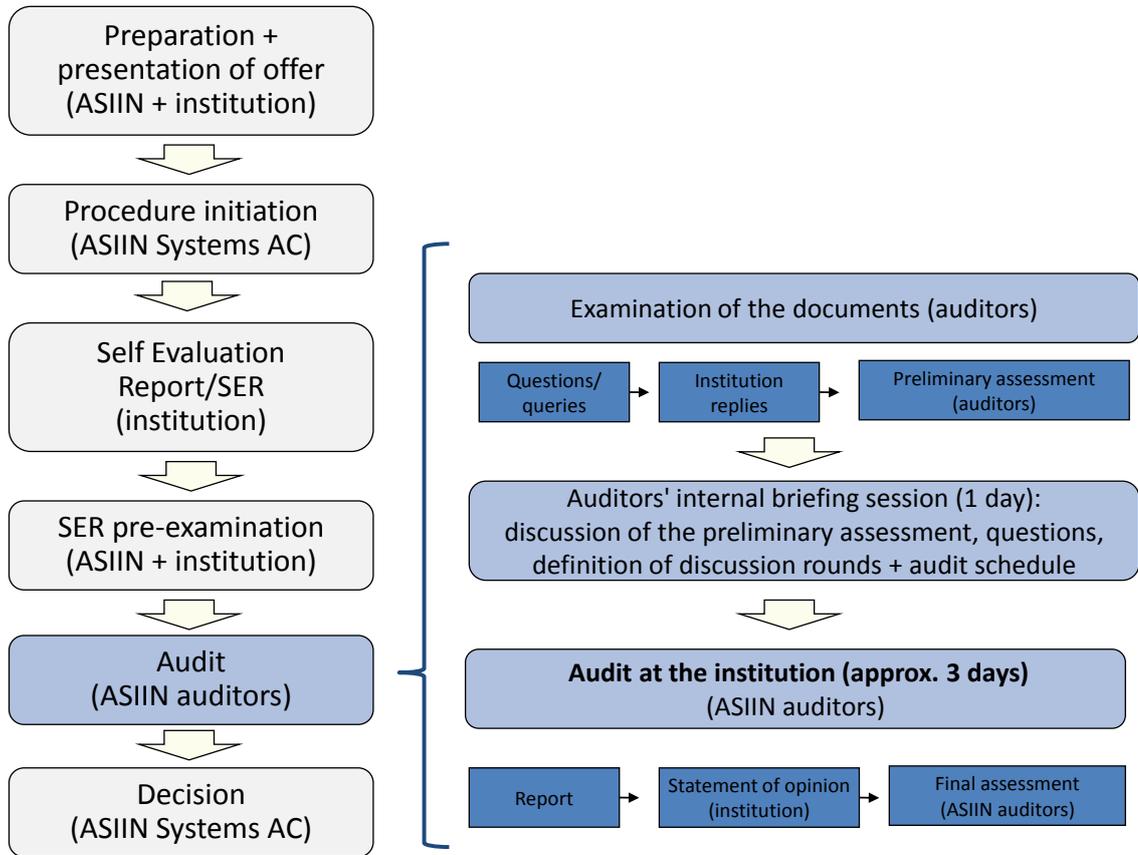
2 = implemented

3 = established and controlled

4 = predictive and proactive

The further report proceeds as follows: After a short executive summary outlining the central findings, a chapter is presented for each evaluation criterion beginning with related questions, the analysis and findings of the peers as well as the respective maturity level of the organization's structures, processes and their interaction with cultural characteristics observed by the peers regarding single criteria. Every chapter concludes with recommendations for further enhancement of quality and organizational maturity.

The certification procedure is divided into the following **stages**:



B. Characteristics of the International Information Technology University Kazakhstan

Kazakhstan is currently pursuing to reach world-class Higher Education and integrate into the common Higher Education Area by implementing the Bologna process standards which include three cycles of higher education system, Credit Transfer and Accumulation System, academic mobility of students and teachers, as well as monitoring the quality of higher education. The National Mandatory Standards of Higher and Post-Graduate Education, the Soviet higher education heritage, firmly prescribe the educational process and its content and do not allow reacting flexibly to economic changes.

On April 4, 2009 the International Information Technology University (IITU) was created under Decree № 881 of the Government of Kazakhstan and registered with the bodies of justice as a semi-state – semi-private organization. The founders were: on the part of the state - Zerde National Info-Communication Holding JSC (hereinafter – the Holding), and the private business University of International Business LLP (the UIB). The IITU founders set up its charter capital. The major goal of IITU is to respond to the increasing demand of IT specialists with adequate graduates.

In May 2009 IITU signed a Memorandum of Understanding and a License Agreement with the iCarnegie subdivision of the world leader in computer science Carnegie Mellon University (Pittsburg, the USA). According to these documents the IITU students study in English American specialized module programs under the Kazakh National standards; upon graduation the students are awarded Kazakhstan's national standard diplomas and Carnegie Mellon certificates recognized all over the world.

Initially the IITU structure comprised 3 academic departments: Management and Social Sciences, Information Technology and Languages, with no faculties. The university signed more than 30 memoranda on cooperation with major industrial enterprises and 6 agreements with leading IT universities in the Baltic region, Russia, Malaysia, Western Europe. In pursuit of its strategic objective to train personnel for the innovative-industrial development of the state, in 2010 IITU opened up 4 new major programs: 1. E-Journalism; 2. Radio Technology, Electronics and Telecommunication; 3. Mathematical and Computer Modeling; 4. Finance in IT. Starting with the year 2010-2011 the University also opened master degree programs in Information Systems and Computer Science and Software Engineering.

For the academic year 2009-2010 the first enrollment in the 4 IITU specialty programs was 405 students (against 350 planned). During the time of the audit in 2016, the overall number of students was about 3.000 students. The peers confirmed a rapid growth in the years since the founding of the university and very dynamic and innovative concept of higher education. IITU intends to build new premises at the center of Almaty and to increase the number of students to a total of about 6.000 students in the medium-term perspective.

C. Analysis and Findings of Peers

I. Definition of quality

Criterion I.1: Objectives

Questions

Institutional dimension: Which quality objectives of the institution have an influence on the quality of teaching and learning? Which of these quality objectives have a high priority, which have a lower priority? Which of the quality objectives reflect existing strengths of the institution? Which of the quality objectives are oriented towards institutional development and are future-oriented? What are the biggest challenges to maintain the achievement of the quality objectives?

Procedural dimension: Which of the objectives related to the quality of teaching and learning have last been *amended*? What were the reasons for amendment? What are the processes to define, to implement, and to review these objectives on a regular basis?

Cultural dimension: Which values and behavioral patterns have the biggest influence on the quality objectives of the institution? Which objectives are of particular importance for the internal stakeholders? Which groups within the institution particularly relate to which of the objectives? Which objectives are rejected by some stakeholders within the institution? Which possibilities exist to discuss among the internal stakeholders different opinions about the quality objectives of the institution?

Analysis and Findings of peers

IITU defines on its website (<http://www.iitu.kz/article/show/id/132>, accessed 07.11.2016) the vision, the mission and a number of strategic objectives. During the audit visit the peers noticed that the vision of the university was publically presented in almost every room of the premises of IITU. IITU defines three strategic directions like “Improvement of the educational process”, “Central Asian leadership in ICT innovation and science”, and “Commercialization of University activities” which contribute directly to the quality of teaching and learning. These strategic directions are specified in goals which are further elaborated in specific objectives. The peers understood that the strategic directions are broken down in more specific and manageable entities. In the self assessment report IITU outlined that it wants to become “one of the leading research universities in the world”; the peers pointed out that from their point of view this goal is overambitious and unrealistic under the given conditions. However, during the audit IITU clarified that it wants to become a leader in “ICT Innovation and Science” in the Central Asian region and further explained plausibly that this goal can be or has partly been achieved already. The official strategic goals on the website do not mention the overambitious goal as outlined in the self assessment report. IITU added that the strategic goals have been reached to a large extent already and the university intends to revise the strategic goals in the near future. Given IITU’s ambition to become a leading research university this has also to be reflected in the strategic goals. For each of the strategic goals, IITU defined “Key Performance Indicators” which comply largely with the

concept of “SMART – specific, measurable, achievable, realistic, time bound” criteria which allows a regular assessment to what extent the strategic goals have been achieved. The strategic dimensions and the respective objectives are being reviewed regularly with different stakeholder groups including students, staff members, business partners, and alumni. However, the peers pointed out that the Key Performance Indicators for the strategic goal “Central Asian Leadership in ICT Innovation and Science” are comparatively vague and undetermined (based on the presentation in the self assessment report) and required further elaboration.

Levels of maturity observed

Institutional Dimension: Maturity Level 3

The peers clearly stated that from their point of view the vision is well communicated in the university community and the strategic directions are plausibly embedded in a comprehensive set of more specific and concrete goals applying to all spheres of the organization. In the light of the explanations provided during the audit the peers concluded that the vision, mission and strategic development goals of IITU are realistic and achievable and contributed to the quality of teaching and learning. Performance indicators of “good learning and teaching” are defined and communicated within the institution; however, the key performance indicators for “Central Asian Leadership in ICT Innovation and Science” need further elaboration. The strategic dimensions of IITU take partly a future oriented perspective as the actual development plans of the management of IITU go beyond the present strategic dimensions and envisage new and representative premises in the center of Almaty. The number of students is also intended to be duplicated compared to the present number of students. The management of IITU indicated that a revision of the strategic directions and the underlying structures is planned to take future developments into consideration and generate a new stimulus of development within the institution. The peers welcomed that announcement and recommended putting a stronger emphasis on research activities as this has not been a clear focal area in the strategic goals thus far.

Institutional Dimension: Maturity Level 3

The first set of strategic goals had been developed by the shareholders and the first rector of IITU in the context of the foundation process; the shareholders, partly coming from the business world contributed an applied and practice-oriented perspective to the strategic dimensions and the objectives. The peers comprehended that stakeholder involvement in terms of staff members and students had been impossible at that stage as the institution was in the process of creation. The Quality Management System of IITU meets the requirements of National Standard ISO 9001-2009 for 5 years; the re-certification of ISO is carried out by the National Agency for Accreditation of management systems EUROASIA MS. Quality assurance procedures take place on all levels. Due to the size of the institution, concerns and criticism can easily be voiced out by staff members and are taken into consideration by management if brought forward in a constructive manner. And even if certain requests cannot be fulfilled, management underlines that plausible reasons are given to the respective stakeholders. The rector presents the example of the lack of parking place which was criticized by the students. After a campus tour organized by the management the

students understood that additional parking space was simply not available. The peers could understand that the feedback loops are closed and criticism is being taken up constructively. But the procedures are not fully formalized which is understandable given the size of the university. However, the peers underlined that with the perspective of growth of IITU the present procedures are not likely to be viable and successful in a more complex organization. The peers recommended establishing more formalized quality assurance procedures to reach maturity level 4.

Cultural Dimension: Maturity Level 2

The peers understood that IITU actively practices a culture of participation on all levels of the organization. As indicated in the previous section, staff members as well as students can raise points of possible improvement and these indications are being taken seriously and may lead to a change; if a request cannot be fulfilled this is communicated transparently. Based on the program and course material provided by IITU the peers could see that learning outcomes are defined on program as well as on course level, however, the peers gained the impression that neither staff nor students are fully aware of learning outcomes and do not take them as a guideline of orientation for program implementation. The peers underlined that learning outcomes should be made more transparent and recognizable to the stakeholders of the organization and that they should serve as a guiding principle in all programs of the institution.

Final assessment of the peers

The peers welcomed the response of IITU and appreciated that IITU is going to revise the strategic goals and the underlying structures in the near future; the peers particularly supported that IITU wants to put a stronger emphasis on research as a focal area in the strategic goals. The peers noted that IITU applies Key Performance Indicators to assess if the goals have been achieved; however, these indicators are not being applied consistently yet. The peers appreciated IITU's indication to develop Key Performance Indicators for all strategic goals and maintained their respective recommendation to assess the results at reaccreditation.

The peers understood that it is a time-consuming process to fully establish the concept of learning outcomes and confirmed that IITU is on a good way to implement this paradigm of competencies and learning outcomes. The peers encouraged IITU to keep up its good work to fully implement the outcome-based approach.

Criterion I.2: (Quality-) Management systems / Governance

Questions

Institutional dimension: What works well with regard to the organisational settings (responsibilities), structures, physical and human resources of the quality-management of the institution? Who is involved, who is responsible, and who is informed? Which changes are planned for the near future with regard to the set-up, structure and resources for quality management – and why? How is the collaboration between the different organizational units (teaching, research, administration) assessed by the different departments, faculties, etc., and by

the central management? Which facets of the collaboration are considered useful, which are considered obstructive??

Procedural dimension: Which procedures (processes) for the implementation of the quality-related policy work well? Which processes for the implementation of quality policies need to be improved by the responsible actors? Are further changes in the processes planned? If yes, why?

Cultural dimension: Which typical values and behavioral patterns of the internal stakeholders have a positive effect on the quality management for teaching and learning? Which stakeholder groups particularly support the quality management for teaching and learning? Which groups are less involved? What are the reasons for higher or lower levels of involvement? What are typical situations leading to changes in the structures and procedures of the quality management system? Who is involved in such changes?

Analysis and Findings of peers

Based on the organizational management scheme provided by IITU the peers comprehended that IITU has a plausible organizational structure with responsibilities and clearly defined channels of communication; due to the culture of participation and open communication issues are sometimes addressed directly to management. Each department and head of department is responsible for quality assurance on the departmental level and quality assurance is being perceived as part of the everyday life activities. Feedback is given through interviews and surveys of students, evaluation of teachers, students' performance, periodic reviews of academic programs, and study of graduates' activities; the peers welcomed these instruments but pointed out that from their point of view a consistent orientation towards learning objectives was missing. They also indicated that based on the information available, possible risks should also play a more prominent role in the evaluation tools. The analysis of the departments is being done by the departments themselves, and then reported to the management. The rector reports to the shareholders, the staff, and the students. Meetings with shareholders take normally place once every two months. There are administrative meetings once a week and all decisions are being taken jointly, therefore everybody knows what is going on in the university. The peers took note of the comparatively high number of meetings and wondered if this frequency was effective. Even though this is not transparent in the organizational chart the peers understood that IITU has established a student governing body and students elected their own president. Hence, students have a strong representation in the institution supporting the interests of the student body. IITU pointed out that the Law department is monitoring the state legislation regularly and identifies which departments are affected by legislative changes. The respective tables are sent to all heads of departments and changes are made where it deems necessary. However, the peers noted critically that no separate Quality Assurance Unit is in place; the Human Resource and Documentation Department is responsible for Quality Management implementation, but the Department has no additional subdivision for monitoring, analysis, reporting and supporting management decisions. Management of IITU explained that given the size and the number of staff members within IITU, a separate Quality Assurance unit was not required and sensible. In each department is one specific person responsible for Quality Assurance procedures, and the Vice Rector is responsible for the overall Quality Assurance coordination. Although the peers could

follow the argumentation of IITU, they underlined that considering the future development of IITU the present management structure will most likely not be able to maintain the present quality assurance procedures effectively.

IITU underlined that the PDCA Cycle (Plan, Do, Check, Act) was consistently applied at IITU. Beyond the internal quality assurance procedures as described above, the key performance indicator for IITU as an institution is the rate of employment of graduates. For that purpose and due to the close connection to the business sector, the university sends questionnaires to the business partners and alumni combined with direct communication with the partners in the context of business-HEI cooperation. The results from the questionnaires and the additional information obtained are thoroughly analyzed and the feedback is taken up in the management procedures when reflecting upon the quality of the degree programs. Based on this feedback, SAP courses, for example, were newly introduced. Or another example is that for successful bachelor programs consecutive Master's and PhD programs had been established while for less successful programs no consecutive programs were introduced. Representatives from business confirmed the good communication with IITU and the capacity of the institution to promptly respond to issues.

Levels of maturity observed

Institutional Dimension: Maturity Level 3

The peers confirmed that the tools, methods and procedures of Quality Assurance are defined and quality reviews are coordinated. The results of data collection of Quality Assurance procedures are analyzed and reported to all relevant stakeholders in the institution including students. The Quality Assurance System is orientated to fulfill the institution's aims of good teaching and successful learning. The institution has a clear understanding whether objectives have been met. Even though the quality assurance procedures and respective responsibilities are clearly defined the peers underlined that the organizational structure without a quality assurance unit should be reconsidered in the light of future developments of IITU. Consequently, the peers recommend setting up a quality assurance unit on its own as the institution develops.

Procedural Dimension: Maturity Level 2

The peers agreed that IITU has implemented a broad and plausible set of quality assurance procedures. The peers could understand that the PDCA cycle was widely established and feedback loops were implemented leading towards a systematic improvement of degree programs. However, the peers recommended verifying if the large number of regular meetings was effective. The peers explicitly emphasized positively the systematic involvement of students and external stakeholders and noted that management of IITU takes respective recommendations into consideration. However, the peers underlined that from their point of view the procedures should be more specifically shaped towards the attainment of learning outcomes. The peers also highlighted the need to take a systematic risk analysis of the implementation of degree programs into consideration. Hence, the peers noted that the procedures were well established but the tools needed to be more focused.

Cultural Dimension: Maturity Level 4

The peers understood that the institution actively supports the involvement of students and teaching staff. The management encouraged the students to form student bodies and to voice out possible concerns and queries. The peers also gained the conviction that the institution is guided by the principle of openness and transparency and that there is no individual risk of staff members of personal disadvantage in case of constructive criticism. IITU actively analyzes the barriers and challenges of stakeholders' participation and in providing feedback to the institution. This kind of analysis could be integrated in the tools of the above mentioned quality assurance procedures.

Final assessment of the peers

The peers could comprehend the explanation of IITU that the number of meetings had a positive impact on the day to day communication and had proven to be effective in the day-to-day management. The peers also welcomed the announcement of IITU to setting up a quality assurance unit on its own and encouraged IITU to vigorously pursue this goal.

II. Educational Programmes / Courses / Trainings

Criterion II.1: Creation and development of programmes / courses / trainings

Questions

Institutional dimension: Which aspects in terms of organisational settings (responsibilities), structures, physical and human resources have an impact on the effectiveness of creation or further developing programmes? Who normally initiates the further development of programmes? What challenges exist with regard to the further development of the full portfolio of programmes? Which educational offers are considered fit for the future and why?

Procedural dimension: Are the processes to create and further develop educational offers considered effective and efficient? What works well and what should be improved? Where does the incorporation of external requirements (legal, social, professional) work well; where could it be improved? What are the reasons? Which processes exist in order to systematically collect stimuli for the further development of programmes?

Cultural dimension: What is expected from the stakeholder groups involved in the design and further development of educational offers? Who is expected to participate? Does the involvement take place as expected? What happens if conflicts between involved stakeholders occur? To which extent are the relevant stakeholders willing to participate and what is their level of information?

Analysis and Findings of peers

IITU was founded as a response to an increasing demand of Information Technology (IT) experts in Kazakhstan. The first programs that had been established followed directly the economic demand identified by the founders of IITU. The normal procedure of developing new programs follows a sequence of stages: the instructors draft the programs; the documents are discussed and approved at the department meetings, reflected in the respective minutes; the Department of Methodological and Academic Affairs of IITU together with the Dean's Office coordinates and oversees the entire process of the working documents' development and approval. Afterwards, the documents are subject to the approval by the Science and Methodology Council. The peers comprehended that IITU maintains this close cooperation with the private sector and seeks continuous feedback from relevant stakeholder groups like business partners and alumni. All departments have the Advisory Board consisting of representatives of economy, industry, and business. Twice a year (May, January), these representatives are invited to discuss the content of the program. The feedback provided by private business partners, alumni and graduates is being used to revise the existing degree programs and make amendments where this deems necessary; this extensive revision process takes place once per year. Additionally, the Departments of IITU decide if new programs should to be established. As outlined in the previous section, if bachelor programs run successfully and if there is positive feedback from business partners and graduates indicate their wish to further develop their competences, new Master's programs or even PhD

programs are being introduced. E-Journalism is being mentioned as a case in point. But it works also the other way round that programs which do not run very successfully and if there is critical feedback from the business partners, consecutive new programs are not being considered. Additionally, new programs are introduced if there is a demand on the labor market; many teachers have worked in industry and have a proper understanding of the developments on the labor market. In addition to labor market requirements, there are strict requirements and governmental rules and regulation defined by government which must be observed when opening up a new degree program. Before new programs can commence they need to obtain a license from the responsible Ministry; this also entails the proof of sufficient and appropriately qualified staff members who need to be hired on full-time or part-time basis if they are not available within the department. Even though the peers understood that a number of procedures and feedback loops are in place to collect relevant information, they are lacking an official methodological guideline for the creation and development of academic programs. Much evolves from the feedback received and considerations based on the running programs but a systematic analysis of new potentials and a clear guideline are missing.

The peers asked in what way research activities are integrated in new and running programs and learnt that each degree program includes courses dealing with scientific methodology on how to conduct research and how to write papers. Furthermore, each program has its own research component where students are requested to conduct projects or write papers. Staff members normally have their own specific field of research which they pursue and offer special courses in their field of research. Based on the state regulations, the feedback from relevant stakeholders and a need for specific graduates on the labor market, the Departments form a task team to develop learning outcomes and a curriculum. This draft version of a degree program is then presented to different stakeholder groups to receive feedback and to amend the concept in the light of the given responses.

Levels of maturity observed

Institutional Dimension: Maturity Level 2

The peers understood that the development of new programs is guided by the strategic dimensions and objectives, feedback from relevant stakeholder groups and a need on the labor market. The peers particularly welcomed the systematic stakeholder feedback which is also considered for the adaptation of running programs and could see that effective mechanism in the decision making process are in place to ascertain that new programs correspond to the internal quality standards of IITU. Programs which do not meet these standards are rejected. However, the peers thought that potential internal and external future developments particularly in the light of the new premises, the economic development of Kazakhstan and the demographic change should be taken into consideration for future planning. Even though in practical terms the creation of new programs is working well currently, the peers recommended developing an official methodological guideline for the creation of programs to grant a systematic approach and to include external future developments.

Procedural Dimension: Maturity Level 3

The peers comprehended that regular feedback loops with stakeholder groups are implemented and the results are used for the further development of course offers. It was plausible to the peers that there are regular assessments to check whether the programs by the institution are in line with the institution's quality-related expectations as to good teaching and successful learning. It is also plausible to the peers that critical information is being used to refrain from setting up new programs. At the end of each course students have to evaluate if the content of the course corresponds to the defined learning outcomes.

Cultural Dimension: Maturity Level 4

The peers praised the fact that IITU promotes a culture of reflective discussion between staff members, students and external stakeholders like business partners, graduates and alumni. The management made the peers understand that it encourages constructive criticism and is ready to take necessary measures to resolve institutional issues. In the audit interviews the relevant stakeholders like business partners, alumni and graduates praised the openness and willingness of the management as well as the lecturers to consider recommendations and sincerely try to constructively further develop the degree programs for the benefit of the students and alumni. However, within the departments in some cases the hierarchical patterns still seem to be the predominant organizational structure. The peers encouraged management to take influence to better implement the culture of open communication not only on management level but also in the departments.

Final assessment of the peers

The peers took note of the information that the standard procedure for creating new educational programs is regulated by the Ministry of Education. However, IITU admits the absence of detailed methodological guidelines for instituting new educational programs. The peers welcomed that the academic-methodological department of IITU is currently developing methodological guidelines for creating new educational programs. The peers also took positive note of the fact that IITU plans to apply to the Regional Academic – Methodological Council to provide guidance in this respect. The peers underlined that in the light of the expected development of IITU and the introduction of new programs, the methodological guideline for the creation of programs needs to be established urgently.

Criterion II.2: Implementation of programmes / courses / trainings**Questions**

Institutional dimension: What are the strengths with regard to structures as well as to physical and human resources in the *implementation* of educational offers? What are the weaknesses with regard to the structures (e.g. organisational set-up, decision-making paths) and to the resources in the day-to-day work?

Procedural dimension: Which procedures in the implementation of programmes (i.e. the delivery of programmes, i.e. the teaching processes) work well? Which can be considered good practice? Which processes need the particular attention of those responsible? What are the reasons? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: How does the collaboration between the different units work in the day to day implementation of teaching? Do typical areas of conflict exist and how are they dealt with? Do all stakeholder groups involved in the implementation of teaching provide the expected input? What are the reasons if expectations are not met?

Analysis and Findings of peers

Management, administration and academic staff are aware of their functions and responsibilities and fulfill them accordingly. During the interview with the staff members, the peers understood that a number of staff members had been recruited from other institutions and that staff members found it attractive to work at IITU due to the competitive salary schemes as well as due to the dynamic and innovative atmosphere at this newly founded university. According to staff members the channels of communication were comparatively flexible and issues can be raised directly with management. Staff members also highlighted the interest to be part of the creation of new programs. The self assessment report stated that there had been insufficient coordination between the teachers who teach the same courses, but the peers learnt that from this academic year on, there is one guiding document for each course which explains the learning objectives and content; beforehand each teacher had to define this individually which led to a number of inconsistencies.

As indicated in the previous section, the organizational setting of degree programs must be clear from the onset and it has to be proven to the respective Ministry that the human as well as the infrastructural environment are in place before the license to start or run a degree program is issued. The peers could understand that IITU tries to make the best possible use of existing staff members instead of hiring new full-time or part-time ones. IITU makes the best possible use of the available facilities and resources; however, the growing number of students means an increasing challenge to the infrastructure of IITU. The peers also assumed that the limited resources available present an obstacle to staff members to pursue state of the art research activities. The peers were aware that plans for the creation of new premises are on the table and the necessary funds had been allocated for this purpose. The planning documents had been shown to the peers.

Levels of maturity observed

Institutional Dimension: Maturity Level 3

The peers confirmed that IITU is aware of strengths but also of weaknesses in the organizational structure. IITU has learnt to make the best possible use of the available resources and tries to resolve infrastructural challenges in a creative manner. Furthermore, especially the management of IITU was able to mobilize significant resources to set up new premises in a medium term perspective which will give IITU better teaching, learning and research opportunities in the future. Even though the peers appreciated this anticipated development they pointed out that IITU

should develop more systematic procedures to regularly identify the need of material and human resources.

Procedural Dimension: Maturity Level 2

The peers understood that the departments have some independence in terms of development of new and implementation of running programs. The organizational structure and processes of program implementation are clearly defined and effective. Job descriptions are available which determine the responsibilities of units and staff members. Furthermore, IITU applies a number of tools, methods and procedures from internal and external stakeholder groups to provide information from which the institution gains detailed insight into the quality of learning and teaching. With regard to new course offers and degree programs, feedback from external stakeholders is being taken on-board as outlined under criterion II.1 and also feedback from student evaluation is taken into consideration. The peers also understood that advisory panels consisting of external stakeholders are involved in the development of new programs. However, it remained unclear to the peers if and to what extent student organizations are involved and actively participate in this process.

Cultural Dimension: Maturity Level 3

The peers understood that the administration of the institution sees itself as a service provider for the core business, which is teaching and learning, of the university. The generally positive culture of communication has been outlined in II.1, even though this does not fully apply to all departments. Academic programs consist of major and elective subjects. The iCarnegie courses are included in the curriculum and are part of the electives, part of the curriculum and compulsory even if called elective. This ascertains a high quality in a number of compulsory courses. However, teachers tend to reduce their workload by offering the same elective courses repeatedly instead of developing new ones which impairs the overall academic dynamics that is desired by management. The peers recommended considering incentive schemes to encourage staff members to offer new elective courses. The students, however, did not complain about insufficient elective courses during the interview round. Conflicts between students and lecturers occur occasionally and are normally resolved amicably as is being outlined under II.5 in more detail. However, even though this might not have occurred yet, the peers could not identify clear procedures to settle any conflicts or overlapping interests of different institution members or relevant stakeholders. The peers underlined that a respective procedure should be clearly defined.

Final assessment of the peers

The peers understood that students' feedback on educational programs is gained through surveys, tutors and advisors and considered accordingly. However, the peers concluded that the overall student involvement in the different procedures of IITU needs to be enhanced. The peers welcomed that this issue has been redirected for consideration to the Student Government's Ministry of Education, which is supposed to suggest new mechanisms for student participation in improving the educational content. The peers thanked IITU for the clarification that some programs have been repeatedly offering the same elective courses with minor variations in the last years. It was partly caused by students' interest in the offered electives. On the other hand,

the elective offerings were limited to only 3 courses. In the current academic year this limitation was lifted also thanks to the changes in State Educational Standard of Kazakhstan (GOSO). Now the students' academic freedom has grown to the choice of 8 elective offerings. This novelty was welcomed by both students and teachers. The peers also praised the growing academic freedom of Universities in Kazakhstan; however, the concern of the peers remained that lecturers may tend to keep offering the same elective courses and therefore the peers recommended introducing incentive schemes to encourage staff members to regularly update elective courses or introduce new ones with regard to new technological developments.

Criterion II.3: Cooperations

Questions

Institutional dimension: How is the cooperation with other institutions and between different internal units organized with regard to the implementation of programmes (structures and regulations)? What works well in the case of internal or external collaborations, what could be improved? How do such collaborations for programmes usually come into being within the institution?

Procedural dimension: Which factors are critical for the smooth organization and implementation of collaborations? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: What principles does the institution have in place for internal and external cooperation for educational offers? Are the existing rules and standards accepted by those affected by them? How are conflicts dealt with? What are the challenges with regard to collaborations?

Analysis and Findings of peers

IITU calls itself "International" IT University which raises an ambitious claim. IITU has signed more than 80 international cooperation agreements with foreign universities. Most of the agreements had been initiated by individual lecturers who used international contacts and exchanges for cooperation agreements which had been formally signed by the international office and the management of the universities. However, it turned out that a number of these cooperation agreements had not been pursued actively. IITU requires that cooperation contracts need to be renewed frequently and if no activities are taking place in the context of these agreements, the contracts expire automatically. Based on this experience, a new policy was introduced stating that cooperation agreements should only be signed with well reputed international universities, and a clear portfolio of activities should be defined. The peers understood that the Departments had not always been fully aware of their role in international cooperation and the lack of English language skills was an additional obstacle for some departments. In practical terms the peers learnt that on staff level, departments invite international lecturers for presentations and seminars in Almaty and a small number of lecturers go abroad for teaching purposes. A number of staff members had been abroad for studying and had gained experiences in a foreign environment. IITU does not

maintain any cooperation with universities from neighboring countries. IITU succeeded in allowing about 50 students per year to participate in short-term or even long-term international mobility; however, the international office aims at sending about 10% of the students abroad annually and achieved less than 2% thus far. The students clearly stated that they would appreciate more international mobility. The main issue to increase international student mobility is the availability of financial support. As only limited funds for international mobility are available it is not likely to boost international outgoing mobility in a short term perspective. During the interview with the students, some of them mentioned that they had applied to participate in an exchange program and had been rejected but they had never been told the exact reasons. Regarding incoming mobility, in the past some international students came for summer courses and an exchange program had been carried out with a university from Malaysia but due to financial reasons it is not likely that this program will be further pursued. The international department indicated full awareness that measures need to be taken to make IITU internationally more known and attractive. Respective public relation efforts are planned for the near future like English video clips about the different degree programs and the living conditions and tourist attractions of Kazakhstan; this kind of information shall be published on the website of the university. IITU also mentioned the fact that it had happened in the past that particularly PhD students who went abroad found job opportunities and did not return. Now the policy demands that PhD students have to sign a contract before they leave the country that binds them to work for IITU after the completion of the PhD thesis.

Levels of maturity observed

Institutional Dimension: Maturity Level 3

The peers understood that internal and external cooperation agreements exist but a number of them are inactive; due to these experiences IITU changed its policy. The peers welcomed that inactive cooperation agreements expire and new ones focus primarily on well reputed universities. Furthermore, the peers recommended that cooperation agreements should be drafted in close cooperation with the concerned departments and measurable “SMART” goals should be formulated aligned to responsible staff members of the departments. In any case, the peers acknowledged that rules for cooperation had been defined and that IITU is on a way to guide international cooperation by rules and does not rely solely on individuals. However, the peers saw considerable room for improvement to integrate international cooperation consistently into the quality understanding of the departments and programs.

Procedural Dimension: Maturity Level 2

Cooperation still depends to a large extent on individual staff members although the peers understood that IITU tries to move away from this concept. Staff mobility is taking place to a limited extent. The actual number of student participants of international mobility lags significantly behind the claim of IITU. The peers comprehended that financial issues present a major issue to a significant increase of student. The peers pointed out that IITU management has proven in other fields to be able to pursue innovative and creative approaches to achieve its goal; in the context of international mobility the peers missed a concerted concept to successfully reach its mission. Additionally, the selection procedure and the reasons for acceptance or rejection of

applications should be made transparent to the concerned students. The activity of the international office to develop a more internationally noticeable website was assessed positively by the peers; however, this should be only the first step followed up by direct communication with potential partners as the peers underlined. Inbound as well as outbound student mobility has significant room for improvement.

Cultural Dimension: Maturity Level 3

The peers noted positively that IITU proved its ability to identify shortcomings and shows the ability to take measures to respond to these issues. The fact that inactive cooperation agreements expire and a new policy was implemented proved this ability to act in the sense of the PDCA cycle. The peers also praised the open communication between staff and students and could see that staff members would provide the necessary support to students to participate in international mobility if the opportunity was given. The peers also welcomed the information that students are being prepared by the international office about the culture of the host country and that students normally have contact with the counterpart institution prior to the mobility. However, the language skills and international awareness should be enhanced in some departments as a prerequisite for more internationalism.

Final assessment of the peers

The peers welcomed IITU's new policy of cooperation with foreign universities which requires a clear portfolio of planned activities and a contact person in charge before signing. The peers also praised that IITU has drafted an MOU template including opportunities of student and staff mobility, visiting professors, scientific cooperation. Moreover, the peers understood that the academic departments of IITU are redesigning their academic programs on a modular basis to allow foreign professors to teach IITU students either by coming for a short-term visit or teaching it online. Consequently, the peers could see that IITU has developed a stringent procedure to abolish inactive co-operations and promotes only co-operations that are actively implemented; the peers reconsidered their original maturity level for this criterion for this . The peers thanked IITU for the additional information on co-operations and corrected the misconception that IITU does not maintain any cooperation with universities from neighboring countries. The peers noted IITU's explanation that cooperation initiatives depend largely on individual staff members; however, many agreements are signed as a result of Ministry of Education recommendations and meetings, Ministry of Education-organized country visits, cooperation with embassies of different countries and on the initiative of IITU shareholders. The peers welcomed that co-operations often start in the context of international projects and develop into inter-university partnership agreements. The peers also noted positively that staff mobility is planned annually in the academic departments' plans and implemented accordingly. With the introduction of modular programs, foreign partner professors will be able to teach IITU students online. The peers comprehended that IITU lags behind in the implementation of its strategic goals of international mobility due to national currency devaluation and limited funds. The peers also welcomed IITU's initiatives in terms of international projects to overcome this funding issue and encouraged the University to further develop the identification of potential funding sources to foster international mobility. The peers understood that IITU has transparent selection criteria and procedures in place

to identify suitable candidates for international mobility; however, based on the subjective perception of some students, the results of the selection procedure and particularly the reasons for rejection of applications should be communicated more transparently to the respective students. The peers welcomed the actions planned by IITU to enhance the instructors' language skills and international awareness and maintained their respective recommendation as a prerequisite for more internationalism.

Criterion II.4: Examination systems and organisation of exams

Questions

Institutional dimension: Which rules and structural provisions have an effect on the design of exams in the programmes? What works well, what should be improved?

Procedural dimension: Which procedures for the exam methodology and exam organisation (including assessment criteria) work well? Which procedures do those responsible have to take particular care of? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Which principles do those responsible have to take into account when designing and organizing exams? Are these principles accepted by all involved stakeholders? What role does the institutional tradition have in the design of exams? Are new assessment methodologies taken into account? Which values and behavioural patterns have the highest influence on the exam system and organization? How do these influence the achievement of the objectives for exams? Do typical conflicts exist among those involved with regard to exam methodology and exam organization? How are such conflicts dealt with?

Analysis and Findings of peers

IITU presented the "Procedures for formative, mid-term/end-of-term and final assessment of student's academic performance" where the rules for examinations are clearly defined. According to the students, the kind of examinations, the time and location are announced far ahead. The procedure is that a teacher of a course develops the assignment which is being checked by the department and needs to get approval before it can be used for testing purposes. The organization of examination is satisfactory and examination related concerns can be discussed with the lecturer. The peers learnt that the students have generally to take three examinations per course and perceive the examinations all in all as fair and comprehensible. However, the peers were skeptical about electronic testing (multiple choices) as the preferred form of examination even though this electronic examination may be supplemented by oral and written exam forms. The peers pointed out that multiple choices testing check primarily knowledge and understanding but they hardly have the capacity to check problem-solving competences, competences of practical application or competences of creatively design new approaches. The peers comprehended that multiple choices tests are supplemented by other forms of examination; however they are the dominant form of attestation. Furthermore, the peers wondered that only 30% of the examination questions are changed every year. Students are not supposed to take any notes of the

examinations and electrical devices to take pictures are forbidden; still the students may pass their knowledge on to other students orally.

The students have to write final thesis according to the degree program they are enrolled in. The auditors looked at some examples of final bachelor's and master's theses and concluded that the standard of the theses was mainly just satisfactory but could be enhanced and advised to give more room for research activities of staff members which would, in turn, provide better opportunities for final theses. The peers were puzzled about the fact that the presented PhD theses were only in Russian even though the second supervisor, by law, needs to be a foreign supervisor. As not all foreign co-supervisors speak Russian appropriately it remained unclear to the peers how the final PhD theses could be assessed by the foreign professor. The peers understood that PhD committees are formed at other universities of Kazakhstan and therefore, the main spoken language was Russian. The peers welcomed that IITU was about to find another solution to also allow English PhD theses. The peers underlined that from their point of view, IITU falls behind its own standards as most bachelor's and master's theses are written in English and PhD theses in Russian. Even though the peers were unable to analyze the PhD thesis due to language constraints they noticed that the number of quoted literature was far below the usual international standard.

Levels of maturity observed

Institutional Dimension: Maturity Level 2

The peers confirmed that the rules and regulations of examinations are clearly defined and staff members are aware of these rules and apply them. However, the peers doubted that particularly the multiple choices tests are appropriate tools to verify the attained competences. The peers agreed that multiple choices tests may be appropriate to a limited extent but they should not be the dominant form of examination. Furthermore, the change of only 30% of the questions generates a certain likelihood of cheating which is unacceptable. A "Policy on Academic Honesty" does not resolve the issue as the peers concluded.

Procedural Dimension: Maturity Level 2

The peers welcomed the system of IITU internal checks and balances like the departmental feedback loops to secure adequacy and appropriateness of examinations. The methods and forms of assessment as well as performance-related expectations are clearly defined and communicated transparently and timely to the students so that students have enough preparation time. The results are available without great delay and do not stand in the way of student progression. However, the standards of final bachelor's and master's theses should be reviewed in the light of international best practice. By the same token staff members should be given more research opportunities which should feature back into the educational process. The peers encouraged IITU to vigorously pursue its aim to allow PHD candidates to write their thesis in English and to ascertain that foreign supervisors can properly fulfill their supervisory tasks. The academic standard of the PhD theses could not be assessed but the peers noticed that the literature citations were far below standard.

Cultural Dimension: Maturity Level 2

The peers conclude that the students are assessed on the basis of transparent and internally checked criteria; rules and procedures are applied in a consistent way. With regard to only 30% of the examination questions being changed the peers indicated their concern and recommended changing from multiple-choice examinations towards more “traditional” examinations in terms of students answering questions in writing where they have to demonstrate that they can apply the knowledge they obtained. Even though the peers agreed that a set of different forms of examinations are applied they underlined that multi-choices questions should not be the dominant form of testing. The planning, implementation and post-processing of examinations is aligned which was confirmed by students and staff members.

Final assessment of the peers

The peers thanked the University for the detailed explanation on the examination system and organization of exams. IITU confirmed the understanding of the peers that computer testing is the prevalent form of examination. The peers comprehended the advantages of computer testing but underlined their criticism that computer testing focuses on assessing the understanding and knowledge of the students. The peers agreed that computer testing might be sensible to a limited extent but it should not be the prevalent form of testing. The peers underlined that the form of examination should focus on the competences of the student and therefore needs to be in line with the intended learning outcomes of a module. The peers welcomed that in the new academic year all oral, written and computer test assignments will be 100% revised regularly. The peers welcomed the policy that PhD students are assigned to a domestic and a foreign supervisor to promote the internationalization of PhD students. The peers keep up their recommendation that Master and PhD students write the final theses in English to be further assessed by a foreign professor; given that the peers could not assess the quality of Master and PhD theses as most of them were only available in Russian or Kazakh they underlined that IITU should ensure that the final theses meet international standards and citation practices.

Criterion II.5: Recognition of achievements

Questions

Institutional dimension: Do the rules, structures and responsibilities for the recognition of achievements obtained from other institutions or in a non-academic setting work as expected?

Procedural dimension: Do the procedures for the recognition of achievements obtained from other institutions or in a non-academic setting work as expected? Are there typical difficulties which regularly occur in the procedures? Which changes are planned for which reasons?

Cultural dimension: What are the guiding principles for the recognition of external achievements? Have the relevant members of the institution and interested students and teaching staff been informed of them and do they accept them? How are conflicts dealt with?

Analysis and Findings of peers

At IITU there are two different units within the university that are responsible for recognition. For bachelor degree programs the responsible unit is the “Department of Methodological and Academic Affairs of IITU” and for master degree programs it is another unit. The Departments follow the “Terms of transfer and restoration of students by types of educational organization” approved by Government of Republic of Kazakhstan № 19 dated January 20, 2015 which is only available in Russian on the website. IITU further explained that the recognition of achievements obtained in other higher education institutions depends on if this university is a participant of the Bologna process. IITU provided the “Regulations on the system of credit transferring of ECTS type” which explains a clear procedure that has to be observed and the documents that have to be provided to obtain recognition. If a university is not part of the Bologna process, each course of the so-called academic transcript is assessed individually by the abovementioned departments. The peers understood that the content of the courses or modules is compared to courses at IITU. In practical terms, the students explained during the interview session that modules that are fully comparable to modules taught at IITU were recognized but modules that did not fully match modules at IITU had not been recognized. The peers understood that the students define “Learning agreements” with their supervisor at IITU to know have clear understanding of possible recognition; however, these learning agreements are based on input and not on the achievement of learning outcomes as the peers comprehended. The peers suspected that recognition was based on a comparison of content and input; the concept of Bologna to look at learning outcomes and competences had not been realized yet. The peers underlined that there may be different ways or courses to achieve the same competence and that is what should be taken into consideration when assessing the possibility to recognize certain courses or modules. Given the present procedure, students will hardly be able to find international universities that offer the exact same modules like at IITU. Consequently, students are not able to complete a semester elsewhere which is fully recognized which means that students who go abroad are required to take courses they missed during their stay abroad which leads to a prolongation of the overall study duration. This clearly contradicts the idea of academic mobility as constituted in the Bologna process as the peers underlined. Furthermore, it did not become clear to the peers if it was the obligation of the university to provide evidence why certain courses or modules are not being recognized as it is required according to the Lisbon declaration. Non-academic achievements like work experiences can be recognized and can substitute compulsory internships in a degree program as the peers were told. IITU also admitted that the overall process of recognition of academic achievements can be very time-consuming and it may take several months before a decision is taken.

Levels of maturity observed

Institutional Dimension: Maturity Level 1

The peers understood that rules, structures and responsibilities for the recognition of achievements obtained from other institutions are clearly defined and openly available to interested stakeholders. As IITU envisions being an “international” university, the modes of recognition are crucial to foster an environment of international mobility without major obstacles and prolongation of study time. However, the rules claim more or less identical courses or modules to be able to be recognized. Competences that may be achieved with methodological approaches different from what is offered at IITU are not being considered. The peers concluded that recognition at its present state is input and not outcome-driven which contradicts the concept of Bologna to foster academic mobility. The peers underlined that from their point of view, the practice of recognition needs a significant shift towards outcome orientation. Recognition from non-academic setting have not been defined which also needs to be changed.

Procedural Dimension: Maturity Level 2

The peers confirmed that the procedures for the recognition of achievements obtained from other institutions and the responsibilities and information channels have been defined. However, the process of recognition and the notification of the respective persons take partly very long which deters particularly foreign applicants. Given the aim to be an “International” university and to attract foreign students to come to IITU, the peers underlined that the processes have to be organized more effectively. Furthermore, the fact that recognition focuses on comparable content and not on comparable competences means that it is almost impossible to study a semester abroad without being required to take certain courses offered at IITU which had not been offered at the partner university. This leads normally to a prolongation of the overall study duration. In practical terms, non-academic achievements are partly recognized to substitute e.g. internships. The peers recommended examining whether the concept of recognition of non-academic achievements cannot be broadened.

Cultural Dimension: Maturity Level 2

The peers agreed that the principles which guide IITU’s rules and procedures for recognizing external achievements have been published on the website and are therefore available to interested Russian speaking stakeholders. In order to foster the development of inbound students, the rules of recognition should also be available in English. It was not clear to the peers if IITU was required to provide evidence why courses are not recognized which is a requirement of the Lisbon convention. The peers could not comprehend fully if students have a right to appeal if they feel that their recognition procedure has not been treated fairly; the peers gained the conviction that based on the open communication culture, issues of this kind can be resolved amicably but in the light of the envisaged development of IITU the peers indicated that clear conflict resolution procedures should be defined and established.

Final assessment of the peers

The peers acknowledged that IITU follows the rules of recognition established by the Ministry of Education and Science of the Republic of Kazakhstan. The peers also welcomed that the students are supposed to sign an “Agreement on academic mobility” before international mobility takes place. The peers understood that the decision of recognition are supposed to be taken within a few days; however, given that students reported that the process of recognition was partly time-consuming, the peers encouraged IITU to analyze the procedure of recognition and identify potential bottlenecks that may lead to a prolongation of the process. In summary, the peers underlined their request to consider learning outcomes in the process of recognition and to also take non-academic achievements into account.

Criterion II.6: Assistance and support**Questions**

Institutional dimension: Which elements of the assistance and support services offered for students are successful? Which changes are required? What are typical challenges to be overcome? Are the physical and human resources adequate and sufficient to implement the expected assistance and support services? How is this verified?

Procedural dimension: How do the processes to provide assistance and support work? Which processes are considered to work well, which need to be improved? Do the members of the institution who are involved in the assistance and support have sufficient information and resources? Are the target groups for assistance and support reached as intended? How is this verified? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Are the offers of assistance and support available used by the intended target groups? If not, why not? How satisfied are the individual target groups with the assistance and support on offer?

Analysis and Findings of peers

IITU provides a broad set of assistance and support services that cover the entire student life cycle. The students confirmed that they had been able to find all relevant information about degree programs on the website even though the peers gained the impression that the website does not provide detailed information about programs and courses at all. But the peers learnt that a new website had just been launched lately and still needed to be developed further; the preceding website was very professional and informative as the students confirmed. Every newly enrolled student is provided with a student guidebook, which gives basic information about the structure of the university, the rules of the educational system and the internal regulations of the university. Additionally, freshman students participate in an Introductory Course which helps and guides students in preparing an individual study plan. During the studies they can make use of the different services offered at IITU. Each student is assigned to a study advisor who provides study

and degree guidance. There are also senior student groups providing consultations to freshmen on the most difficult academic subjects. Every professor has hours for independent work with the students, the ratio is 2 contact hours and 1 hour consulting. IITU maintains a mentoring system; a mentor is responsible for a group of 20 students and the performance of the students is communicated to the students. The mentors also have specific hours for mentoring purposes. There had been complaints by the students that in some cases a mentor had not been available but the peers understood that generally this mentoring system works successfully. The students confirmed that they are obliged to participate in course evaluations and can provide direct feedback to the teachers. Students can turn to the head of department to complain about issues. The students reported cases where, based on the complaints of students, the teaching load of lecturers was reduced or the teacher was completely replaced. The peers indicated their concern that this kind of disciplinary action might have a humiliating effect on the teacher, and it prevents the possibility for both parties (lecturer and students) to develop an acceptable solution. The peers pointed out that students need to learn to develop coping strategies to manage inconvenient situations and teachers need to be given the chance to respond to student complaints. Support should also be provided to help the teacher develop their teaching and address issues raised by students if considered valid. Replacing a teacher should, as a norm, be the last solution to a problem. In summary, the peers gained the impression that appropriate assistance and support measures are made available to the students which was confirmed by the students. Examples were provided where students raised issues with the head of department and a solution was found that was satisfactory for all parties.

The peers were impressed about the services provided by the Career Center. The Career Service guides students in career planning and searching for internship and employment, encourages the activities of the alumnae association and tracks down the main trends in the graduates' job placement. IITU provided statistical data about the whereabouts of graduates which proved a very high response rate and that only a small fraction of graduates did not find employment after graduation. The students and graduates confirmed in the interview rounds that they feel well prepared for the labor market because the education entails more applied components (e.g. internships) compared to other institutions, IT is in high demand and the English language skills are an additional asset. Particularly the Career Fairs organized by IITU are of great value to many students to find informal access to companies. The peers witnessed a number of examples where graduates developed their own business in close cooperation with private companies; IITU maintains a kind of an "incubator" to foster entrepreneurship among graduates. Students who developed first ideas can apply for support from the university to write a professional business plan or to get start-up funding. Based on the information provided by IITU about 15 new businesses had been founded in the last three years of which 9 are still running.

IITU offers special social and financial support to students with specific needs like disabled people, orphans, or immigrants; there is a special grant for children with disability which allows them to study for free and students coming from an impoverished social background get a considerable discount on the student's fees. Students with children can change the time of examination to accommodate their specific situation; the same applies to students with other kinds of limitations.

In the first years of IITU it turned out that the number of female students was far below the envisaged threshold. As a consequence of this observation IITU actively tried to attract female students and decreased the study fees by 10%; and the number of female students could be increased considerably.

Levels of maturity observed

Institutional Dimension: Maturity Level 4

The peers understood that IITU has assistance and advice measures in place that cover the entire student life cycle and pay particular attention to potential future developments in terms of considering feedback from business partners and alumni. Especially the focus on employment opportunities through the “Career Fair” organized by IITU and the strong support of entrepreneurship to generate new and innovative business ideas was appreciated by the peers. The peers noticed differentiated consultation concepts for different student groups at different stages of the student life.

Procedural Dimension: Maturity Level 3

The peers confirmed that the procedures for communicating and providing assistance and support are well developed and effective. However, the communication channels namely the English website does not fulfill the claim of a state-of-the-art IT University; although the website seemed to be of acceptable quality as confirmed by the students, the peers could only judge what is available at present. The peers comprehended that IITU has some Unique Selling Propositions (USP) compared to other universities in Kazakhstan and even the wider region. The internal information channels and feedback loops are in place to further develop the concept of assistance and advice; however, measures taken on the basis of student complaints should keep a sense of proportion and avoid humiliating effects on certain stakeholders (e.g. unsatisfactory performance of teachers). By the same token, it should be considered that conflicts also hold a constructive element.

Cultural Dimension: Maturity Level 3

The peers understood that IITU has a concept of assistance and advisory measures in place that ensures that all information, assistance and advice services are known and accessible. If additional support measures for specific groups are required, IITU seeks pragmatic and effective solutions to assist the respective stakeholders. There is a culture that the needs of the individual shall be met as far as possible; this includes additional tutoring if required and that students are actively involved in the university management process. IITU frankly stated that cases of academic dishonesty had occurred and that respective measures like a “Code of Academic Honesty” have not borne any significant fruits yet. The peers recommended that the advisory skills of persons in charge could be further enhanced also in order to promote a culture of academic honesty.

Final assessment of the peers

The peers confirmed that IITU provides a broad set of assistance and support services that cover the entire student life cycle. Especially the focus on employment opportunities through the “Career Fair” organized by IITU and the strong support of entrepreneurship to generate new and innovative business ideas was appreciated by the peers. The peers confirmed that this criterion has been largely fulfilled.

III. Management of resources

Criterion III.1: Material and human resources**Questions**

Institutional dimension: Which elements particularly support the achievement of the quality objectives in this area as defined by the institution? What are typical difficulties and how are they dealt with?

Procedural dimension: Do the processes for the allocation and administration of physical and personnel resources, specifically for teaching and learning, within the institution work according to the expectations of the different groups and units? How does the institution integrate external (legal and economic) requirements? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli? Which changes are planned or will become necessary based on such stimuli?

Cultural dimension: How can the members of the institution, e.g. teaching staff and students, participate in managing physical and human resources for teaching and learning? Do all members of the institution feel adequately informed about the management of physical and financial resources? Which values and methods are supported or expected of the people involved in terms of the use of resources? What are the guiding principles at the institution to avoid misuse or waste of resources? Are the set rules and guidelines accepted by those affected by them? How are conflicts dealt with?

Analysis and Findings of peers

IITU has significant plans to expand: it wants to double the present number of students up to 6.000 and it wants to build entirely new premises in the city center of Almaty. The shareholders made available the necessary funds and architectural concepts have been presented to the peers. Looking at the present situation, IITU is a comparatively young university that implemented new and innovative study programs in Kazakhstan and that recruited young professionals from businesses and other universities. Many staff members see the advantages of IITU in the opportunity to participate in the development of something completely new where creative ideas can be realized; the competitive salary scheme was also mentioned as a significant advantage. Some teachers also highlight the excellent equipment in their specific field which is a considerable asset compared to other universities. The “Human Resource Policy” defines clearly the personal and professional profile of possible candidates; the recruitment procedure follows defined rules

and is transparent and targeted to find the best suitable candidates. The peers wondered if the one-year contracts were not a significant hurdle to recruit suitable candidates. The peers understood that each employee is employed with the perspective to stay on and under normal circumstances the contract is annually renewed as it is also in the interest of the university to keep well-educated staff. During the first year, new employees are being checked regularly to ascertain that the candidate is fit for the job. Furthermore, it is the usual practice at other universities as well as in industry to start employment on the basis of a one-year contract; this is not a considerable disadvantage. The proportion of University staff holding scientific degrees and titles is compliant with the Decree of the Government of the Republic of Kazakhstan. The staff-student ratio is also in line with international standards. The peers gained the impression that the staff members are highly motivated and ready to make the best possible contribution to the development of IITU.

When the university started, it had hardly any equipment at all; a lot of new equipment was purchased and represented the state-of-the-art. A number of computers are from 2009 which is comparatively old but they have been maintained and upgraded and can still be used for less sophisticated IT applications as the students confirmed. The computer equipment is consistently checked and the overall situation is assessed annually. If teachers have specific requests regarding infrastructure they can bring this forward and management tries to find solutions. More recently, IITU had been able to get a full Mac-computer laboratory which presents high quality equipment as the peers confirmed; also other state of the art computers are available. To make sure that right from the start an appropriate academic standard is met, i-Carnegie Mellon IT certificates were introduced, a well-reputed and internationally acknowledged IT certificate. The benefit for the students was that they could participate in well-developed courses that meet international requirements. Staff members also need to get regular training to be able to conduct i-Carnegie seminars. The benefit for the students is that these courses provide special competences in the fields of IT and that research is being carried out according to Carnegie standards. The University is located in a 10-storey office building. The peers conducted a campus tour and concluded that literally the space available is used to its full extent; IITU proved to find creative solutions to also make use of small rooms like the language learning rooms named after English speaking countries. However, given the present situation of equipment, the peers underlined that the goal of IITU to be a leading research university seemed unrealistic to them. The students indicated that more learning space should be available but also admitted that the heads of department try to seek acceptable solutions. The lack of dormitories was also raised by the students. The library was newly refurbished and had an innovative outfit. The textbooks were partly outdated as the peers noted but it was explained by the teachers as well as by the students that the textbooks served rather as a basis and up-to-date teaching material was provided in the classes. The peers criticized the limited access to internationally acknowledged e-journals. Some lecturers indicated that they had private access to certain e-journals but agreed in principal that this was an issue. The peers reckoned this to be a serious concern as limited access to e-journals and up-to-date information means a restriction with regard to research activities.

The budget of IITU stems largely from tuition fees from the state budget. Additional sources of income are tuition fees of self-paying students, Research and Development projects and other

operational revenues like fee for various professional courses delivered by university staff as well as income from consultation activities. These resources are largely used for the daily operations. The management of IITU explained that strategically it is the intention to recruit more self-paying students and to gain more independence from state funds; this goal can only be achieved with a very high quality of learning and teaching. Furthermore, more Research and Development projects shall be implemented. At the moment, the university is in a good and viable financial situation. The peers pointed out that from their point a systematic risk analysis taking different scenarios into consideration was missing.

Levels of maturity observed

Institutional Dimension: Maturity Level 2

The peers confirmed that IITU has a clear understanding of the kind of teachers to perform high quality teaching. Due to competitive salary schemes and an innovative spirit IITU succeeds to recruit well educated and business related staff members; the students indicated that they would welcome more teachers with a clear business related background. Due to its vision to be more international IITU also wants to have a higher proportion of international advisors and teachers; the peers underlined that more vivid exchange programs would be a first step into more internationalisation and would be easier to realize than to recruit international lecturers. In summary, the peers concluded that IITU has sufficient and appropriately educated staff members to successfully carry out its operations. The facilities are somewhat overloaded but still acceptable and IITU has proven that it is capable to find unconventional and creative ways to solve the problem. The equipment is well maintained and at least partly at a state that allows to conduct research; however, given the ambition of IITU to be the leading IT research university in the region more equipment in volume as well as more equipment of up-to-date standard would be required. Due to the plans of new premises the peers understood that the situation will be relieved in the medium term but given the present state of equipment the peers argued that IITU would not be able to achieve its vision. The financial situation of IITU is stable and in line with the development aims of the institution. Although the management of IITU has a clear vision and plans for the further development of the institution, the peers recommended introducing a systematic risk analysis to be able to identify potential hazards at an early stage and to be able to develop counter measures to successfully overcome these challenges.

Procedural Dimension: Maturity Level 3

The peers confirmed that IITU has proven that it can manage unforeseen situation and can develop creative solutions (e.g. language rooms) to react to shortfalls in both material and human resources. IITU has standard procedures in place to fill vacancies and reallocate academic employment positions where needed. The funds and equipment are allocated in a way which supports the best possible achievement of the intended learning outcomes; however, the access to well-known and internationally acknowledged e-journals is an issue that needs to be resolved to give students as well as teachers access to up-to-date information sources. IITU has procedures in place to regularly reflect on possible adaptations to internal and external economic requirements; this should be further supplemented by a risk analysis.

Cultural Dimension: Maturity Level 3

There is a remarkable culture of communication and openness at IITU; the challenge will be to maintain this culture of communication if IITU is going to grow as planned at the moment. Every week, administrative meetings take place and all decisions are being taken jointly. This means that at IITU procedures are in place that level and balance the different interest groups and enable the institution to come to solutions that is accepted by all stakeholders; however a formal conflict resolution procedure is lacking and should be developed to have a clear guideline in case conflicts cannot be resolved amicably. Heads of departments are also involved frequently involved in this process. The institution supports a careful and cooperative approach in using the resources available and the members of the institution agree with the principles of how to use the resources.

Final assessment of the peers

The peers gratefully acknowledged that additional resources are available that have not been mentioned in the self-assessment report and looked at during the onsite visit. The peers welcomed that IITU has actively used the server virtualization technology and Microsoft's cloud technology. The peers took positively note of the budgetary allocations for the purchase of new IT equipment and agreed with IITU that these new equipment acquisitions will help IITU to achieve its goal. In the light of these tremendous efforts, the peers decided to reconsider the maturity level for this criterion. The peers recommended keeping up the ongoing investment into more up-to-date equipment to implement IITU's vision to be a leading IT university in the region. The peers acknowledged that IITU is in a testing phase to verify the benefit of access to internationally well-reputed e-journals; the peers underlined that this access must be granted to staff members as well as to students. The peers comprehended that IITU is annually audited by an independent financial auditor and the university provides a risk analysis in the framework of the audit. The analysis results are reported in the audited financial statements that are prepared in accordance with the international financial reporting standards. In its financial reporting IITU applies the established accounting policies. Subsequently, the audited financial statements are published in the media. Thus, the peers agreed that IITU's risks are annually analyzed. According to the recommendations it was decided by IITU to rearrange the Financial Department into a Department of Economy and Finance, whose main objective is planning, controlling over the budget and analysis (including systematic risk analysis). Currently the University Board of Directors is to approve the main functions of the Department of Economy and Finance and define its place in the organizational structure of IITU. Regulations on the Department of Economy and Finance and job descriptions for the staff of the department are under development.

Criterion III.2: Human resources development**Questions**

Institutional dimension: Which challenges have to be mastered with regard to staff development? Do the existing concepts take these challenges adequately into account?

Procedural dimension: How does the implementation of the staff development concept work? What are typical difficulties? How are they dealt with? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Which of the concepts and offers for staff development – specifically those with a focus on subject-relevant and didactic development – are particularly well received by teaching staff? Which are not? Why?

Analysis and Findings of peers

Every department at IITU has a year plan of qualification development. The heads of department know who needs further training and they also account for the budget. When the heads of department device the year plans, they make an application to the financial department which approves an annual budget for each department. Every staff members should receive some kind of further qualification in five years. So if budgetary constraints do not allow for all staff members who apply to participate in further training, the head of department tries to make sure that interested staff members will be able to participate a year later. IITU distinguishes between Short-term training (less than 72 hours) which normally means the invitation of international professorial, the medium-term training (from 72 to 100 hours) which normally refers to workshops and trainings seminars annually conducted at the University, and long-term training (over 100 hours) which refers to local and international fellowships of staff (sabbaticals, training in a magistracy, doctoral studies etc). In some cases IITU maintains specific agreements with vendors like Microsoft to ascertain that staff members receive training regularly. IITU underlined that in 2016 about 70% of the employees at the university got the opportunity for further training and about 50% if the training was provided by external institutions like attending conferences; the lecturers give the example of an international conference in Malaysia where staff members attended and the expenses had been covered by the university. Another example is the support of three PhD theses being co-supervised in Malaysia who are supported in terms of travel expenses by the university. The teachers confirmed that CISCO courses or certification courses at the Mellon University had also been financed by IITU; lecturers who teach i-Carnegie Mellon courses have to have a specific certificate to teach. Staff members admitted that online training courses could be used more extensively. There is also a system of mentorship where less experienced colleagues are being mentored by more experienced ones which directly contribute to the effectiveness of teaching. The peers indicated that the further training efforts could have a stronger focus on didactical techniques of teaching.

Levels of maturity observed

Institutional Dimension: Maturity level 2

The peers understood that a clear concept and responsibilities for human resource development are in place and that interested staff members can apply for participation; every staff member is supposed to participate in further training every five years. The organization and the budgetary support are decentralized on department level and staff members are actively involved in the planning. Even though the peers welcomed the system and the awareness that further development of staff members is key to a successful and “learning” institution, they recommended aligning the further training opportunities more clearly to the intended learning outcomes (including didactic approaches to better achieve learning outcomes) and to make more use of online training courses.

Procedural Dimension: Maturity Level 2

The peers confirmed that the procedures for the development of human resource development are in place. The heads of department are responsible for the allocation of training opportunities to staff members who need to further develop certain competences; all staff members are supposed to participate in training within a defined time frame. Each department works out plans for the teachers’ professional development, which reflect the terms, location and dates. They are based on teachers’ individual plans. It was not fully clear to the peers to what extent results from quality assurance measures are also taken into consideration into the institutional development plan. Staff members are supposed to report the results upon the completion of training courses. The peers welcomed this feedback mechanism, however, from their point of view, these tools, methods or procedures should be further developed to get a more distinguished feedback on the strengths and weaknesses of its staff development approach. The consistently indicated lack of English proficiency among administrative but also some teaching staff is an indication to the peers that the human resource development approaches need further refinement to achieve the institutional objectives. Additionally, the peers were lacking a concise and effective approach to make use of sabbaticals to have a positive effect on research activities.

Cultural Dimension: Maturity Level 3

The peers gained the impression that IITU provides an environment in which staff members can critically reflect upon their achievements and qualifications and propose fields of further development which is largely being supported by IITU, limited primarily by budgetary constraints. Generally, the management of IITU takes a favorable view of the use of development opportunities. The peers encouraged IITU in addition to the efforts taken to develop a long-term professional development plan for the entire institution to be able to more strategically channel the efforts of human resource development to achieve the institutional objectives. The planning and decision making should remain on the level of the departments as the peers agreed but the heads of department should be supported by institutional long-term human resource development plans.

Final assessment of the peers

The peers welcomed that the University plans to conduct a series of seminars of further education and training for staff members and keep up their recommendation to focus the further training of

staff members on learning outcomes, didactical and educational approaches in line with the intended learning outcomes, outcome-oriented testing and research activities. The peers learnt that IITU maintains a “University Committee on Academic Affairs and Disciplinary Control” which is meant to resolve conflict situations. The Committee is a standing collegial body created to process applications, complaints or to reveal inconsistencies and make recommendations and proposals for compliance with rules and academic policies of the University, ensuring discipline of students and University staff, and also to manage conflicts. The peers understood that conflict resolution procedures and institutional bodies are in place.

Criterion III.3: Interaction with research

Questions

Institutional dimension: Are there any challenges at the points of interaction between teaching and research? Do the existing concepts take these challenges adequately into account? What are the strengths of the existing concepts and arrangements?

Procedural dimension: How are the processes to link teaching and research designed? Who is involved, who is responsible, and who is informed? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Which values and modes of behaviour are expected from the members of the institution when it comes to combining teaching and research? How is the expected mode of behaviour supported? To which extent do the different members of the institution share and accept the expected values and behaviour?

Analysis and Findings of peers

The management of IITU underlined that scientific research is a priority of the university and every teacher is supposed to conduct research. The research is carried out in line with the approved IITU strategy. 40% of a teacher’s workload is supposed to be dedicated to research and 60% of the time is dedicated to teaching and student support services. The staff members admitted during the interview round that the time dedicated to research is partly being used for student support or administrative services; many of the staff members use their free time in addition for research activities. Every professor combines research with student projects so that students can actively participate in the research; however, during the discussion with the lecturers the peers gained the impression that this transfer from research to teaching depended on the teacher. The peers underlined that from their point of view a concept to combine teaching and research should be further elaborated. The majority of research activities is dedicated to applied research but fundamental research is also carried to some extent. Research activities at the university are conducted on three different levels - international, national and institutional. On the international level, international research activities materialize as participation in international projects, joint

researches with partner universities, participation in scientific conferences etc. However, especially the international research activities should be further improved to meet the objectives of IITU, as the peers pointed out. The publication of articles in internationally referenced journals is being awarded with incentives. Even though sabbaticals in terms of long-term research activities without teaching commitments are mentioned in the report, staff members indicated that the concept is not actively implemented. On national level, the University has obtained research grants based on research proposals from public institutions but partly also from public institutions. IITU can prove a number of successful research applications and a significant amount of funding resulting from this. On the institutional level all research activities are pursued and supported in 4 directions: university science (research of academic staff and students), scientific management, material and human. The equipment at IITU is partly in an appropriate condition to pursue more sophisticated and complex research activities, however the limited access to internationally acknowledged e-journals presents a severe obstacle to keeping staff members updated about latest scientific developments which is in a fast growing field like IT essential as the peers underlined.

With regard to the organizational structure, the peers noted that there is an Academic Council and a Science Methodology Council in place; the vice rector is in charge to manage and oversee inter alia the research activities. There is no additional top management position in place focusing primarily on academic research. Research activities depend largely on personal ambition and fields of interest, a systematic monitoring of international research activities are primarily based on individual efforts. The peers were missing a long-term financial and organizational development policy for research (procedure of funds distribution). This may hamper long-term scientific research ambitions as the distribution of fund is not secured for a longer period of time and the distribution of research funds may be uneven among the departments. One of the important indicators of the research work evaluation is the staff and students scientific publications citation. In 2015, university staff citation index amounted to H-index = 5. The peers acknowledged successful research activities on departmental and individual level and welcomed the intention of IITU to take efforts to intensify research work by distributing funds, allocating human and material resources. But a more systematic approach on top management level and more transparent procedures of research fund allocation are required.

Levels of maturity observed

Institutional Dimension: Maturity level 2

The peers understood that scientific research is a priority of IITU and all staff members are obliged to be involved in research activities. The peers also noticed that staff members of IITU had been successful in attracting research funds and in contributing to internationally acknowledged research discussions. But from an institutional point of view, the peers underlined that a top management position should have a clear focus on research and should support and strategize research activities from an institutional point of view. At this stage, research still depends largely on individual preferences of teachers and is not fully embedded into the organizational management structures of IITU; research activities should lead to stimuli for the planning and further development of courses as the peers emphasized. Resources for research are available and

allocated to relevant stakeholder but this could be organized more transparently and in line with the overall institutional development strategy. The same applies to research activities and the transfer into teaching. The peers comprehended that the management of IITU wants to support a combination of research and teaching; however, this should be underpinned by a plausible concept which should serve as a general guideline for all departments.

Procedural Dimension: Maturity level 1

The peers were convinced that most teachers combine their research activities with teaching and succeed in transferring research into the teaching and learning process. However, clear procedures how this should be done are not fully defined and therefore differed from lecturer to lecturer. The peers encouraged IITU to develop a clear procedural concept which needs to be documented and communicated to all staff members. The quality assurance methods should provide data to enable management to judge whether expected combination of teaching and research works well and according to expectation.

Cultural Dimension: Maturity level 2

The peers confirmed that students are made aware of the research activities at all academic levels by staff members and that opportunities are in place to actively participate in research activities; this was also confirmed by the students although some students pointed out that they would like to be involved more intensively. Even though IITU is trying to maintain high quality equipment to provide a conducive environment for research activities, the limited access to international e-journals is an obstacle for up-to-date research as the peers underlined. The peers underlined that a general institutional concept in terms of combining teaching and research needed to be further elaborated.

Final assessment of the peers

The peers welcomed that IITU acknowledged that some kind of Research Department in the University organizational structure was needed and that a concept to integrate teaching and research should be further elaborated. The IITU Innovation Center was established to develop and coordinate research activities. The idea to introduce the results of the research into the elective courses of specialties was approved at the meeting of the Academic Council.

Criterion III.4: Interaction with administration

Questions

Institutional dimension: What are the guiding principles and rules for the role and function of the administration linked to teaching and learning? Which elements of support for teaching and learning by the administrative units of the institution work well? What areas can be improved? What are typical challenges for the administration in order to effectively support the quality objectives for teaching and learning? How are these challenges dealt with?

Procedural dimension: How are the administrative units involved into the design, (further) development and implementation of educational offers and their quality assurance work? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Which values and methodologies are characteristic for the role of the administration in the processes of introducing, (further) developing and implementing educational offers as well as in their quality assurance? Which attitudes and behaviour are expected? How are they promoted? Are the set rules and guidelines accepted by those affected by them? How are conflicts dealt with?

Analysis and Findings of peers

IITU has a hierarchical organizational structure with a clear understanding of competences and powers from the upper to the lower levels of management; the participation of all entities in implementation of the University Strategy is of high priority and actively pursued as the peers understood. The Administration has three levels in educational process management which are the top administration (Rector and Vice-Rector), the mid-level administration (Deans, Vice Deans) and lower-level administration (heads of academic departments). However, next to the rector is solely the vice-rector in a top management position dealing with a number of tasks and responsibilities; the peers wondered if this structure was adequate to properly fulfill all responsibilities of top management. This is a particular concern with regard to an independent quality assurance unit which is being elaborated in more detail under criterion I.2. The administrative staff like all staff at IITU is selected according to clearly defined staff selection procedures and consists of qualified professionals. English competences are desired but no hindrance for recruitment if not available; English language development opportunities are offered and the administrative staff is highly encouraged to take advantage of these opportunities. The peers underlined that a university with international ambitions needs to have English speaking administrative personnel because administrative services need also to be available to potential foreign students; presently most of the administrative documentation is available in Russian and Kazakh only. With regard to the supervision of teaching and research activities, Key Performance Indicators had been introduced in 2013. They are widely accepted as a guideline for performance, however the lecturers conceded that the KPIs are still in an experimental state and are not implemented to the full extent yet.

Levels of maturity observed

Institutional Dimension: Maturity level 2

All in all the peers gained the impression that the administrative setting supports the preparation, implementation and quality management of the organization. The staff are well qualified and appropriately equipped to fulfill the tasks successfully; the documentation and filing system is well developed and works smoothly. The English proficiency of the administrative staff members needs

to be enhanced in the medium term to be able to realize the vision of an international university. Given the organizational structure, the peers gained the impression that top management is fully aware of its duties; however, the peers doubted if the management is appropriately staffed to successfully implement all its duties particularly with regard to its research ambitions and a successfully working quality assurance system. More specifically, the vice-rector position, for example, seemed overloaded with responsibilities. With regard to the envisaged development of IITU the peers indicated that the administrative structure needs to be reconsidered.

Procedural Dimension: Maturity level 3

The peers understood that the individual administrative units are consistently involved in all academic processes namely the introduction, further development and implementation of courses. Each unit is aware of its tasks and makes its contribution in terms of administrative and budgetary support. However, the Key Performance Indicators to measure the performance and success of individual staff members as well as units are not being used to its full extent to provide management with all necessary information to gain a holistic picture. The peers understood that the concept of Key Performance Indicators has just been introduced lately and further elaboration is still required. But the peers were convinced that IITU is on a constructive path to achieve its goal. Conflicts are resolved by bilateral and multilateral negotiations as the peers understood. So far this rather informal system seems to work successfully; however the peers strongly recommended developing clear criteria of decision making if conflicts cannot be resolved amicably. The explanation that decisions are taken based on the “priorities of the university” needs to be further clarified.

Cultural Dimension: Maturity Level 4

The peers confirmed the constructive and supportive environment at IITU which fosters a culture of communication and transparent decision making procedures. The institution supports horizontal and independent co-operations between the administration and academic units. There is the general feeling that every staff member can bring in ideas and is heard even on top management level. Only within some departments the communication culture can be further enhanced. The administration, academic units and teaching staff communicate on a regular basis in order to improve the quality of services provided. The frequency of meetings is high and in some respect the effectiveness of meetings can be improved. The peers witnessed a culture of “one big family” with administration and academic staff pursuing the same goal and trying to complement each other to join forces and jointly bring the institution forward. The administration and teaching staff support each other. The more or less “unique” working environment of IITU was positively highlighted throughout all groups of staff members and students.

Final assessment of the peers

The peers recommended improving the English proficiency of the administrative staff members to be able to realize the vision of an international university. The organizational structure and the staffing of administration are being dealt with in other criteria as the peers confirmed.

IV. Transparency and documentation

Criterion IV.1: Rules and regulations for programmes / courses / trainings

Questions

Institutional dimension: Which rules and regulations for educational offers have been defined? Whom do they address? Which units of the organisational setting are responsible? What works well?

Procedural dimension: How are the documents that define the rules for studying at the institution developed? How are they published and updated? How does the institution integrate external (e.g. legal) requirements into the processes? What are typical challenges with regard to the draft, update and dissemination of rules? How are they dealt with? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Do the members of the institution – specifically students and teaching staff – feel adequately informed about the rules and regulations for programmes that affect them? Are the rules accepted by the respective members of the institution affected by them? Are the rules transparent and understandable for all stakeholders?

Analysis and Findings of peers

It has been indicated under criterion II.6 that the university's website – at least in the English version – provides only limited information on the university, its services and particularly the content of the different degree programs. The regulatory internal documents of the University cover educational and administrative processes. IITU pointed out that about 20-30% of the content of programs and courses is regulated by government and about 70% of the content can be decided upon in an academically free manner. Even though governmental regulations mean certain limitation in the academic freedom, IITU learnt to cope with these governmental specifications, and it does not lead to stagnation as the university underlined. There are internal procedures in place to ascertain that governmental changes are being brought to the attention of the university and are communicated internally to the relevant departments. The documents are regularly updated accordingly. Internal and official documents are published on the university website considering privacy and information security requirements as IITU indicated; this could not be fully verified by the peers. Other sensitive information is available on the Intranet or within the institutional information systems, where personal information and decisions are accessible only to the persons involved.

Levels of maturity observed

Institutional Dimension: Maturity Level 2

The peers confirmed that the documentation available provides transparent and comprehensible information about the access to programs, the type of programs, the learning objectives and intended learning outcomes; however much of this information is made available to students via the internal website or at the beginning of the studies. The peers could not find much program related information on the website, particularly in English. The peers pointed out that IITU wants to attract more international inbound students and for that purpose a proper website description is crucial. As indicated in one of the previous sections the peers understood that the web provider and the entire website have just been changed recently. But regardless of this fact, the upgrade of the websites should be implemented rapidly. The indication of IITU that a lot of program related information is not provided on the website deliberately as more specific program information will be available at the beginning of the studies is not comprehensible to the peers. The underlined that the website is the ideal platform to showcase the university and illustrate the Unique Selling Proposition of IITU compared to other universities in the country or wider region. The peers understood that graduation documents are issued at IITU; however among the appendices the peers could not identify a "Diploma Supplement". Hence the peers were unable to judge whether the issued certificates and diplomas provide all relevant information with regard to the aims, intended learning outcomes, structure and level of the course as well as about the student's performance. The peers kindly ask to submit relevant graduation documents as additional information. All internal normative documentation is approved by the Rector, monitored by the relevant departments, and undergoes regular audits by the QMS agency. The peers agreed that the Quality Assurance system is designed to consistently reflect upon the achievement of the envisaged goals; however, the peers could not be convinced that the Quality Assurance procedures also generate information that helps to further develop the documentation system and the documents. The Quality Assurance Manual (Appendix I.2.b.2) depicts a number of procedures for the maintenance of Quality Assurance but the regular review of documents is not included and the peers recommended taking this into consideration.

Procedural Dimension: Maturity Level 3

The peers confirmed that within the hierarchical system of IITU the responsibilities of the different administrative levels are clearly defined and thus the relevant stakeholders know which rules and regulations need to be created and adopted by them. External requirements especially from relevant ministries in Kazakhstan are regularly checked and the information is communicated to the concerned departments at IITU. If changes are introduced, they are traced on the relevant website and corrected. Changes on the department level like changing a name, for example, means a number of changes in referenced documents which is being done jointly by the members of a department. This turned out to be a good and successful practice. The IT still tries to find ways to make all changes in referenced documents automatically. If serious changes occur all heads of department are informed by the rector in writing. Due to regular administrative meetings and the culture of open communication, the peers understood that all relevant stakeholders are integrated into the communication and know changes of documents they are concerned with. Additionally, IITU is about to introduce a circulation system of documents. The peers could also follow the reasoning that rules and regulations in the documents is being reviewed and amended if any kind of feedback suggests a possible improvement. However, the peers outlined that the critical

reflection when creating and developing program related documents could be taken up more systematically in the Quality Assurance System.

Cultural Dimension: Maturity Level 2

The peers confirmed that the teaching staff and students are informed about existing documents containing the rules concerning them and any changes to such documents. The peers also comprehended that in the regular administrative meetings administrative as well as teaching staff members are involved and take influence in the documents if this deems necessary. However, although the participation of students is generally fairly well developed at IITU the peers could not see that students are actively involved in the creation or modification of documents containing rules of programs or other kinds of regulations that concern them. The peers recommended enhancing the participation of students also to more administrative procedures.

Final assessment of the peers

The peers learnt that the University website information is being currently updated; the peers underlined that the website needs to contain information about the university, its services and the different degree programs. The peers thanked IITU for providing Diploma Supplements and Transcripts of Records. The peers acknowledged that the Diplomas and Transcripts of Records provided information on the individual performance of students; however, the peers could not see that the qualification profile of the degree program is outlined and statistical data as set forth in the ECTS User's Guide is not included to allow readers to categorize the individual result/degree. The Diploma Supplement and Transcript of Records need to be amended accordingly.

Criterion IV.2: Documentation**Questions**

Institutional dimension: How does the system for the documentation, document management and filing of information work? What are typical difficulties and how are they dealt with?

Procedural dimension: Do the processes with regard to the documentation and filing of information about teaching and learning / about programmes work as expected? What are typical challenges and how are they dealt with? How are the external requirements for transparency and documentation which are relevant to the institution (e.g. disclosure obligations and voluntary publication) embedded into internal processes? Where do stimuli for changes or for improvement come from? How can they be fed into the system and what are the processes to deal with such stimuli?

Cultural dimension: Do the members of the institution – specifically students and teaching staff – feel adequately informed about the educational offers and their general conditions? Which attitudes and behavior are expected from the members of the institution with regard to internal and external information policies, also in terms of achieved quality objectives and need for improvement? Are these expectations accepted by the different stakeholder groups within the institution?

Analysis and Findings of peers

The document management system comprises several information systems and archiving resources as defined in the relevant IITU rules; some important original documents are still available in paper form. Each department maintains a nomenclature of document folders with a special identification system; this filing system meets the requirements of the current legislation and complies with the objectives of the University. During the audit the peers received an introduction into the documentation and filing system and confirmed that the digital as well as the paper based system works appropriately; requested documents could be found without any delay. Information on educational achievements of the student throughout the study cycle is stored electronically in the automatic identification system Platonus which allows keeping track of a student's performance and taking influence where it deems necessary. In the departments there is also a significant amount of outdated data stored which negatively influences the usability of the databases. Most of the documents are stored in Russian language; documents connected to English courses are also available in English but not all of them.

Levels of maturity observed**Institutional Dimension: Level 3**

The peers confirmed that IITU has a documentation system in place which manages all central documents and supports the processes of planning and implementing degree programs. Particularly the data collected by the Quality management System provides management of IITU with the information they need to adopt measures. The documentation and filing systems work in line with the respective legal and functional requirements.

Procedural Dimension: Level 2

The peers confirmed that all relevant stakeholders like administration, teaching staff and students have access to relevant documents which are consistently updated; there are limitations for the different user groups and it is ascertained that only information relevant for the specific group is provided. However, there are sometimes significant delays in the provision of specific data to other units. IITU management highlighted this challenge itself and seeks a solution jointly with the heads of department. The peers welcomed this self-critical attitude and encouraged IITU to continue its path in finding an institution-wide solution. Meetings and decisions are documented. Reasons are given for all decisions which have an impact on teaching staff and students; even if decisions are unfavorable for certain groups, management explicitly explains and tries to make relevant stakeholder groups understand; this also includes students. External legal requirements relevant for documentation and transparency are continuously taken into consideration in the respective processes. The quality assurance and documentation system of IITU provides target-group specific information about the programs and their quality; two educational portals of the University maintain information about the learning process of each student for the entire life cycle.

Cultural Dimension: Level 3

The peers noted that the members of the institution are aware of the minimum requirements as to the form and quality of documentation in their area of activity. The staff members as well as the students confirmed that the channels of communication worked satisfactory. The management wants to focus on electronic filing and reduce the paper files to a necessary minimum as digital systems are more effective and quicker; additionally, it avoids the duplication of documents. The peers supported this envisaged change. However, external stakeholders like potential students, course applicants or partners from the labor market do presently not receive all the relevant and useful information that is available. The reasoning that information provided on the website might be abused by competitors does not convince the peers because well reputed international universities provide detailed information on the website for interested stakeholders and do not seem to be disadvantaged.

Final assessment of the peers

IITU has a documentation system in place which manages all central documents and supports the processes of planning and implementing degree programs. Particularly the data collected by the Quality management System provides management of IITU with the information they need to adopt measures. However, there are sometimes significant delays in the provision of specific data to other units. IITU management highlighted this challenge itself and seeks a solution jointly with the heads of department. The quality assurance and documentation system of IITU provides target-group specific information about the programs and their quality; two educational portals of the University maintain information about the learning process of each student for the entire life cycle.

D. Evidences provided by IITU

Appendices

I

- Appendix I.1.a.1 – License of IITU
- Appendix I.1.a. 2 – IITU Strategy
- Appendix I.1.a. 3 – KPI Regulations
- Appendix I.1.a.4 – KPI based Quality Management goals
- Appendix I.1.b.1 – Minutes of Board of Directors
- Appendix I.1.b.2 – Quality Objective Planning Scheme
- Appendix I.1.c.1 – Regulations of Academic Council
- Appendix I.1.c.2 - Regulation of SMC
- Appendix I.1.c.3 - Regulations on Rectorate
- Appendix I.2.a.1 – IITU Organizational management scheme
- Appendix I.2.a.2 – IITU Charter
- Appendix I.2.a.3 – Certificate Conformity
- Appendix I.2.a.4 – Information about the audits
- Appendix I.2.b.1 - Quality Insurance policy
- Appendix I.2.b.2 - Quality Management Manual

II

- Appendix II.1.a.1 - GOSO
- Appendix II.1.a.2 - TUPP
- Appendix II.1.a.3 - Modular Educational Program
- Appendix II.1.a.4 - Catalogue of electives
- Appendix II.1.a.5 - UMKD
- Appendix II.1.a.6 - UMKS
- Appendix II.1.a.7 - Syllabus BA, MA, PhD
- Appendix II.1.a.8 - Rules of compiling academic courses
- Appendix II.1.b.1 - Minutes of employer's meeting
- Appendix II.2.a.1 – Job description of Associate professor
- Appendix II.2.a.2 – Regulation on Teacher's workload
- Appendix II.2.b.1 – Academic calendar
- Appendix II.2.b.2 – Curriculum Planning Scheme
- Appendix II.2.c.1 – DL screenshot
- Appendix II.2.c.2 – Student survey screenshot
- Appendix II.2.c.3 – Student survey
- Appendix II.4.a.1 – Regulation for exams
- Appendix II.4.b.1 – Examination rules
- Appendix II.4.b.2 – Regulation on students attendance
- Appendix II.5.a.1 – Regulations of credit transfer (ECTS)
- Appendix II.6.a.1 – Regulation on student government
- Appendix II.6.a.2 – Rules of writing of diploma paper
- Appendix II.6.b.1 – MES Order # 152 (Credit System)
- Appendix II.6.b.2 – IITU Code of Ethics
- Appendix II.6.b.3 – Dynamics of BA graduates employment, 2015
- Appendix II.6.b.4 – Results from Center of Pension payment
- Appendix II.6.b.5 – Platonus
- Appendix II.6.c.1 – The policy of academic honesty (Russian)

III

- Appendix III.1.a.2 - Individual plan
- Appendix III.1.a.4 - Dynamics of the University financing
- Appendix III.1.a.5 - Rules for registration of users
- Appendix III.1.a.6 - Rules of Library use
- Appendix III.1.a.7 - KABIS screenshot
- Appendix III.1.a.8 - HR Policy
- Appendix III.1.a.9 - University personnel maintenance program
- Appendix III.1.a.10 - Rules of Labor code
- Appendix III.1.a.11 - MES Order on Library stock
- Appendix III.1.a.12 - Rules of IITU Labrary use
- Appendix III.1.b.1 - Rules on competitive positions
- Appendix III.1.b.2 - Financial Planning and reporting scheme
- Appendix III.1.c.1 - IITU Code of Ethics
- Appendix III.1.c.2 - Regulation on employer's attestation
- Appendix III.2.c.1 - Teacher's survey
- Appendix III.3.a.1 - List of publications with impact factor of IITU for 2015
- Appendix III.3.a.2 - Scientific research at IITU scheme
- Appendix III.3.c.1 - Teacher's survey, research
- Appendix III.4.c.1 - Regulations on disciplinary control

IV

- Appendix IV.1.a.1 - Documented procedures of IITU
- Appendix IV.1.a.2 - MES Order # 107 (internship)
- Appendix IV.1.a.3 - Documented procedures of degree programs
- Appendix IV.1.a.4 - Provisions on summer semester (Russian)
- Appendix IV.1.a.5 - Provisions on Olympiads Center (Russian)
- Appendix IV.1.a.6 - Provisions on academic mobility (Russian)
- Appendix IV.1.b.1 - MES Order # 420
- Appendix IV.1.b.2 - MES Order on assessment (Russian)
- Appendix IV.2.a.1 - Instruction on antivirus protection

E. Comment of the Higher Education Institution (27.12.2017)

The International University of Information Technology expresses its deep gratitude to the ASIIN Accreditation Agency for the high quality, responsible and prompt performance of its contractual obligations, strict observance of the timelines in conducting the institutional certification of our University.

The University is also fully satisfied with the composition of the expert group selected according to the university profile. We do appreciate the level of organization of the expert group's activities, its skillful management by the head of the group Prof. Dr. Norbert Grünwald, the experts' competence and professionalism, their friendly attitude to the IITU students, employees and employers.

The aptly done certification report has revealed the IITU weaknesses both on the institutional and on the departmental levels, and made us realize the need to revise our tactical approaches and strategic goals, formulate our closest targets and revamp our overall work plan taking into account the ASIIN experts' recommendations. We hope ASIIN will sustain its demonstrated policy of communicating with universities and become our long-term trustworthy international partner.

Having studied the experts' certification report the IITU authorities are fully satisfied with the comprehensive analysis of our activities and would like to make several comments on some of its points.

The comments of IITU have been integrated into the final version of the accreditation report.

F. Summary: Peer Recommendations (31.01.2017)

Mature Levels:

Areas to review		Maturity 0 = non-existent; 1 = defined; 2 = implemented; 3 = established and controlled; 4 = predictive and proactive	Requirements/Recommendations
I. Definition of quality			
I.1 Objectives	a) institutional	3	Some KPI need to be further elaborated
	b) procedural	3	QA procedures need to be further developed
	c) cultural	2	Lack of awareness of Learning outcomes; LO are not used as guideline
I.2 (Quality-) management systems/ governance	a) institutional	3	No separate quality assurance unit
	b) procedural	2	Tools need be improved with regard to attainment of learning outcomes and risk analysis
	c) cultural	4	
II. Educational Programmes / Courses / Trainings			
II.1 Creation and further development of programmes / courses / trainings	a) institutional	2	Lack of an official methodological guideline for the creation of programs
	b) procedural	3	Regular feedback loops with stakeholders are used for program adaptation and the creation of new programs
	c) cultural	4	
II.2 Organisation (implementation of programmes / courses / trainings on offer)	a) institutional	3	Systematic approach to identify additional infrastructural needs
	b) procedural	2	It is not clear in how far students are involved; procedures for conflict resolution need to be defined

Areas to review		Maturity 0 = non-existent; 1 = defined; 2 = implemented; 3 = established and controlled; 4 = predictive and proactive	Requirements/Recommendations
	c) cultural	3	Research is not considered sufficiently
II.3 Cooperations	a) institutional	3	IITU developed a stringent policy to abolish inactive cooperations and maintain only agreements that are actively implemented
	b) procedural	2	International cooperation still depends strongly on individuals but often develop in the context of international projects; IITU should identify further sources of funding for international mobility; reasons for rejected applications on international mobility should be communicated more transparently
	c) cultural	3	Language skills and international awareness should be enhanced in some departments as a prerequisite for more internationalism
II.4 Examination systems and organisation of exams	a) institutional	2	Multiple choice does not check the competences. It is also harder to test deep thinking skills.
	b) procedural	2	Only 30% of the questions are changed; final theses barely met international standards
	c) cultural	2	No focus on learning outcomes
II.5 Recognition of achievements	a) institutional	1	Recognition focuses too much on content and not on learning outcomes, no

Areas to review		Maturity 0 = non-existent; 1 = defined; 2 = implemented; 3 = established and controlled; 4 = predictive and proactive	Requirements/Recommendations
			clear rules on non-academic achievements
	b) procedural	2	Focus on comparison of content and not of competences
	c) cultural	2	Focus on content and not on outcomes, conflict resolution is not formally defined
II.6 Assistance and advice	a) institutional	4	Have all kinds of rules also for people with disabilities
	b) procedural	3	Poor communication channel of website, disciplinary actions should be proportional
	c) cultural	3	Advisory skills of persons in charge could be further enhanced
III. Management of resources			
III.1 Material and human resources	a) institutional	2	Given the present state of equipment IITU would not be able to achieve its mission of the leading IT university in the region; however the new resource allocations help IITU to move into envisaged direction
	b) procedural	3	No access to up-date e-journals
	c) cultural	3	IITU should keep up the culture of open communication when implementing its growth strategy
III.2 Human resources development	a) institutional	2	Human resources development should be better aligned to learning outcomes
	b) procedural	2	More critical reflection on HR development

Areas to review		Maturity 0 = non-existent; 1 = defined; 2 = implemented; 3 = established and controlled; 4 = predictive and proactive	Requirements/Recommendations
			approaches; English language competences can still be further enhanced
	c) cultural	3	A long-term professional development plan for the entire institution
III.3 Research	a) institutional	2	No research position on top management level, limited access to international e-journals
	b) procedural	1	The procedures for the combination of research and teaching are not fully defined and transparent to all staff members
	c) cultural	2	An institutional concept in terms of combining teaching and research is recommended
III.4 Administration	a) institutional	2	In the light of envisaged growth, IITU needs to reconsider the top management structure; English competences need to be enhanced to realize vision of international university
	b) procedural	3	KPIs need to be further developed and used to its full extent; Conflict resolution procedures need to be formalized and more transparent
	c) cultural	4	
IV. Transparency and documentation			
IV.1 Rules and regulations for programmes /	a) institutional	2	The English website provides only limited information, no DS available, no revision of documents foreseen.

Areas to review		Maturity 0 = non-existent; 1 = defined; 2 = implemented; 3 = established and controlled; 4 = predictive and proactive	Requirements/Recommendations
courses / trainings	b) procedural	3	QA could be used more effectively for the revision of documents
	c) cultural	2	Students are not actively involved in the modifications of documents
IV.2 Documentation	a) institutional	3	IITU needs to improve the access to documents of other units
	b) procedural	2	Problem English website
	c) cultural	3	IITU wants to turn to digital filing; however, not all relevant information is available presently.

Based on the certification report the peers recommend:

The peers recommend awarding the ASIIN System Seal to the quality management system of the International Information Technology University, Kazakhstan with requirements for one year until 28 February 2018. The extension of the certification until 30 September 2023 is subject to the fulfillment of the requirements.

Requirements:

- A 1. (ASIIN I.1) Revise and update the strategic goals of IITU applying Key Performance Indicators consistently to assess if the goals have been achieved. Research should be taken up as a focal area in the strategic goals and the organizational structure.
- A 2. (ASIIN II.1) Develop an official methodological guideline for the creation of programs to grant a systematic approach and to include external future developments.
- A 3. (ASIIN II.2) Enhance the overall student involvement in the different procedures of IITU.
- A 4. (ASIIN II.4) Ascertain that examinations are competence oriented and assess the achievement of the intended learning outcomes. All oral, written and computer test assignments need to be revised regularly.
- A 5. (ASIIN II.5) Consider learning outcomes in the process of recognition and take non-academic achievements into account.
- A 6. (ASIIN III.1) Ascertain access to internationally acknowledged e-journals.

- A 7. (ASIIN III.3) Develop a concept to better align research to teaching.
- A 8. (ASIIN IV.1) Update the university website information and provide information on the university, its services and the content of the degree programs.
- A 9. (ASIIN IV.1) Make available a Diploma Supplement in English to all students. The qualification profile of the degree program and the statistical data according to the ECTS-Users' guide in addition to the final grade have to be provided.

Recommendations:

- E 1. (ASIIN I.1) It is recommended implementing the concept of competencies and learning outcomes throughout the entire institution of IITU.
- E 2. (ASIIN I.2) It is recommended setting up a quality assurance unit on its own.
- E 3. (ASIIN II.1) It is recommended to take influence to better implement the culture of open communication at all levels of IITU.
- E 4. (ASIIN II.2) It is recommended introducing incentive schemes to encourage staff members to regularly update elective courses with regard to new technological developments or offer new elective courses.
- E 5. (ASIIN II.3) It is recommended identifying further sources of funding to foster international mobility.
- E 6. (ASIIN II.3) It is recommended communicating the reasons for the rejected applications of international mobility more transparently to the concerned students.
- E 7. (ASIIN II.3) It is recommended enhancing the English language skills and international awareness in some departments as well as among administrative staff members as a prerequisite for more internationalism
- E 8. (ASIIN II.4) It is recommended that Master and PhD students write the final theses in English to be further assessed by a foreign professor.
- E 9. (ASIIN III.1) It is recommended keeping up the ongoing investment into more up-to-date equipment to implement IITU's vision to be a leading IT university in the region.
- E 10. (ASIIN III.2) It is recommended to focus the further training of staff members on learning outcomes, didactical and educational approaches in line with the intended learning outcomes, outcome-oriented testing and research activities.

G. Decision of the Accreditation Committee (14.02.2017)

The Accreditation Commission for institutional accreditation took note of the maturity levels suggested by the peers and discussed the procedure. The Accreditation Commission decides to award the ASIIN System Seal to the quality management system of the International Information Technology University with requirements for one year. The extension of the certification until 30 September 2023 is subject to the fulfillment of the requirements. An additional onsite visit is not required.

Requirements:

- A 1. (ASIIN I.1) Revise and update the strategic goals of IITU applying Key Performance Indicators consistently to assess if the goals have been achieved. Research should be taken up as a focal area in the strategic goals and the organizational structure.
- A 2. (ASIIN II.1) Develop an official methodological guideline for the creation of programs to grant a systematic approach and to include external future developments.
- A 3. (ASIIN II.2) Enhance the overall student involvement in the different procedures of IITU.
- A 4. (ASIIN II.4) Ascertain that examinations are competence oriented and assess the achievement of the intended learning outcomes. All oral, written and computer test assignments need to be revised regularly.
- A 5. (ASIIN II.5) Consider learning outcomes in the process of recognition and take non-academic achievements into account.
- A 6. (ASIIN III.1) Ascertain access to internationally acknowledged e-journals.
- A 7. (ASIIN III.3) Develop a concept to better align research to teaching.
- A 8. (ASIIN IV.1) Update the university website information and provide information on the university, its services and the content of the degree programs.
- A 9. (ASIIN IV.1) Make available a Diploma Supplement in English to all students. The qualification profile of the degree program and the statistical data according to the ECTS-Users' guide in addition to the final grade have to be provided.

Recommendations:

- E 1. (ASIIN I.1) It is recommended implementing the concept of competencies and learning outcomes throughout the entire institution of IITU.
- E 2. (ASIIN I.2) It is recommended setting up a quality assurance unit on its own.
- E 3. (ASIIN II.1) It is recommended to take influence to better implement the culture of open communication at all levels of IITU.

- E 4. (ASIIN II.2) It is recommended introducing incentive schemes to encourage staff members to regularly update elective courses with regard to new technological developments or offer new elective courses.
- E 5. (ASIIN II.3) It is recommended identifying further sources of funding to foster international mobility.
- E 6. (ASIIN II.3) It is recommended communicating the reasons for the rejected applications of international mobility more transparently to the concerned students.
- E 7. (ASIIN II.3) It is recommended enhancing the English language skills and international awareness in some departments as well as among administrative staff members as a prerequisite for more internationalism
- E 8. (ASIIN II.4) It is recommended that Master and PhD students write the final theses in English to be further assessed by a foreign professor.
- E 9. (ASIIN III.1) It is recommended keeping up the ongoing investment into more up-to-date equipment to implement IITU's vision to be a leading IT university in the region.
- E 10. (ASIIN III.2) It is recommended to focus the further training of staff members on learning outcomes, didactical and educational approaches in line with the intended learning outcomes, outcome-oriented testing and research activities.

H. List of participants

I. List of teachers for Interview

Department of Information systems

No	Name	Year at IITU	Courses
1.	Pashchenko G. N., assos. professor	2	Algorithms, data structures and programming, WEB technology
2.	Moldagulova A. N., assos. professor	7	Information and Communication Technology, Architecture and Design (SDP 5), Project Management (SDP 8), Application of mathematics and statistics in IT
3.	Satybaldiyeva R. Zh., assos. professor	7	Information and Communication Technology, Architecture and Design (SDP 5), Advanced Software Engineering
4.	Ospan A. B. , senior-lecturer	1	Databases in IS, Networking and Security (SDP 9)
5.	Amirgaliyev, B. E., assoc. professor	5	Machine learning: the teacher training, Organization of research

Department of Economics and Finance

No	Name	Position	Academic degree	Year of employment	Courses offered
1.	Berdykulova Galiya Mertayevna	Professor	Candidate of Economic Sciences	2010	1.Management 2.Economic theory 3.Bases of the economic theory
2.	Sagandykova Saule Shaidullova	Associate Professor	PhD	2015	1.Bases of the economic theory 2.Macroeconomic 3.Microeconomics
3.	Omarova Aygul Shamilevna	Associated Professor	DBA	2013	1.Finance 2.Marketing 3.Marketing management
4.	Omarov Galym Burkitbaevich	Assistant Professor	Candidate of Economic Sciences	2015	1.Organization of business 2.Public and local administration 3.E-governance 4.Corporate management 5.Financing of projects
5.	Maulenov Askar Onlasyovich	Assistant Professor	PhD	2015	1.Corporate finance 2.Financial calculations in Excel 3.Investments 4.Financial markets and intermediaries 5.Derivative financial

					instruments Analysis of financial statements
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Department of "Media Communications and History of Kazakhstan"

№	Ф.И.О.	Должность	
1.	Nurmuhambetova Galia Amirgalievna	Associ. Professor, Ph.D.	Ecology
2.	Velitchenko S.N.	Associate professor	disciplines in journalism, speech technique, writing articles
3.	Shorohov Dmitri Pavlovich	Assist. -prof, Ph.D.	Disciplines of photo journalism and build redactor
4.	William Adeleke	Senior Lecturer, Masters	Sociology
5.	Beck Ali Yerzhan	Assistant professor	History of Kazakhstan
6.	Toleubekov Asyl	Assistant professor	Philosophy

Department of Mathematical and Computer Modeling:

№	Full Name	Position	Discipline
1	Kulpeshov Beibut Shaiykovich	professor	Discrete mathematics BA Statistics BA
2	Dzhumabaev Dulat Syzdykbekovich	professor	Mathematical Analysis-1 BA Application boundary problems and methods of their solutions MA The method of parameterization of the study and solution of boundary value problems arising in applications MA
3	Alipova Bakhyt Nurashevna	assistant- professor	Mathematics in Economics BA Mathematical and Computer Modeling of physical Prozesse BA
4	Uteshova Roza Esenovna	assistant- professor	Differential Equations BA Probability Theory and Mathematical Statistics BA Mathematical Analysis-3 BA Linear algebra BA
6	Karashbaeva Zhanat Ospankyzy	senior-lecturer	Introduction to Computational Mathematics Simulation of ill-posed problems of mathematical physics Inverse problems of the process of crude oil pipeline transportation MA

Department of Komputer Engineering and Telecommunication

No.	Name	Position	Employment since	Discipline
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1	Aitmagambetov Altay Zufarovich	Professor	2010	1.Modern wireless telecommunications technology 2.Fundamentals of radio engineering circuits and signals 3.Electromagnetic compatibility of radio electronic devices
2	Mishina Aigerim Yerzhanovna	Senior-lecturer	2012	1. Connecting networks (Cisco 4) 2.Routing and Switching Essentials (Cisco2) 3. Scaling networks (Cisco 3) 4.Computer Networks (Cisco 1) 5.Organization Operating Systems 6.Operating Systems
5	Pygay Viktor Timofeevich	Senior-lecturer	2011	1.Scaling networks (Cisco 3) 2.Routing and Switching Essentials (Cisco2) 3.Cisco 1. Introduction to Network Technology 4.Information and communication technologies
6	Ipalakova Madina Tulegenovna	Assistant professor	2011	1.Oracle Database 11g: Introduction to SQL (Oracle 1) 2.Information and communication technologies 3.Networks and Distributed Computing (SSD8)
8	Brodyagina Mariya Alexandrovna	Senior-lecturer	2013	1.Application Development (SDP2) 2.Application Design Choices (SDP3) 3.System Level Programming (SDP10) 4.Java Programming Language 5.Oracle Certified Professional, Java EE 5 Web Component Developer (Open Source 1)
9	Sariyev Kairat Aidarbekovich	Senior-lecturer	2011	1.Digital Circuit Design 2.Introduction to robotics (Robotics 1) 3.The theory of electrical chains

Languages department

No	Full name	Position	Experience in IITU	Courses
1	Jolamanova Baliya Jalgasbayevna	associate professor	8	Professional English Business English
2	Sholakhova Aizhana Abdugaliyevna	assistant - professor	8	Professional English Business English
3	Zhanabaeva Svetlana Battalovna	associate professor	4	Professional English English Masters Course
4.	Yermakova Vera	Assistant	5	Professional English

	Alexandrovna	professor		Research in reading and writing
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II. List of students

Group 1

No	Name	Course	Specialty	Level
1	Samat Sakhiyev	4	Informatics	BA
2	Beibut Tukibayev	4	IS	BA
3	Victoriya Polonskaya	4	IT Finance	BA
4	Indira Kutbanbayeva	4	Journalism	BA
5	Asset Berdibek	4	CSSE	BA
6	Mikhail Sukhorukov	3	CSSE	BA
7	Ten Khandor	1	IS	MA
8	Dunayev Adil	2	IS	MA
9	Moldagulova Ayganym	2	CSSE	MA
10	Dadykina Yekaterina	2	CSSE	MA
11	Saymasayeva Sholpan	1	IS	PhD
12	Kunadilov Sultan	2	CSSE	PhD
13	Orazbekov Sayatbek	2	IS	PhD
14	Tolebayeva Karlyga	2	IS	PhD

Group 2

No	Name	Course	Specialty	Level
1	Shamil Galiyev	4	IT Finance	BA
2	Saltanat Kassymkhanova	4	Informatics	BA
3	Miras Maratuly	4	CSSE	BA
4	Vadim Miropolskiy	4	CSSE	BA
5	Mark Kim	4	CSSE	BA
6	Konstantin Scherbakov	3	CSSE	BA
7	Smazhan Adilet	2	PM	MA
8	Nurlybaeva Aynur	2	IS	MA
9	Kovalev Aleksey	2	CSSE	MA
10	Zharmagambetov Arman	2	MCM	MA
11	Syrymbayeva Asel	2	IS	PhD
12	Khaimuldin Nursyltan	2	CSSE	PhD
13	Yedilkhan Didar	3	CSSE	PhD
14	Zhuanyshhev Ilyas	2	IS	PhD

List of graduates (alumni) (will be divided into two groups)

	Name	Year of graduation	Spacialty	Position	Company
1	Dzhanayev Nurlan	2013	IS	Director	Intellect incubator
2	Dzhigitbek Daniyar	2013	IS	Network administrator	ITS Kazakhstan
3	Zhatybayeva Aigerim	2013	IS	Developer	AO Kazakh Instrakh
4.	Victor Gladkov	2016	CSSE	Program developer	Bitcom software
5.	Kuatbek Berdybayev	2014	CSSE	Leading engineer	Altel
6.	Sanzhar Surzhanov	2013	CSSE	Project manager	IBec Systems
7.	Assel Abdrakhan		E-journalism	Mmanager of Information and communication department	JS "Information and analytical centre" Ministry of Education and Science
8.	Timur Alkhabayev		E-journalism	News portal journalist	Tengrinews.kz
9.	Taiken Batyrkhan	2015	IT Management	Business owner	Business owner
10.	Sadykova Aigerim	2016	It Management	Field sales executive	DHL company
11.	Aliya Ibraimova	2016	IT Management	Analyst of unit on market risks	JSC "Bank Home Credit"

III. List of employers

Department of "Journalism"

№	Name	Position	Contacts	E-mail
1	Catherine Kurabaeva	Publisher "Isker media" editor	8707-123-41-89	korabaeva_katya@mail.ru
2	Kenzhe Zhumanly	Russian radio, Editor	8701-336-60-53 727-250-66-57	kenze2002@mail.ru
3	Torehanov Danijar	"Almaty akshamy" deputy editor-in-chief of the newspaper	87011113681	mistertory_62mail.ru
4	Mukhashev Bolat	Editor of digital news service in the Academy of JSC Kazakh-British Technical University	87081568885	bolat.mukashev@gmail.com

5	Taikenova Mairash (скайн)	Head of press service of the Ministry of Education and Science of Kazakhstan	87017110766	zere_07@mail.ru
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Department of " Information systems "

No	Name	Position	Contacts	E-mail
1	Stanislav Semenov	Head of Sales Department «IT Support group»	8 777 8188881	a@itsupport.kz
2	Amirkhan Askar	Director of Business JS «AXOFT»	87773417275	Askar.amirhanov@axoftglobal.com
3	Dosmagambetov Temirlan	Director of Business Ltd «BPMI International (SAP)»	8 777 721 0435	timadosma@gmail.com
4	Baizhikenov Bakhytzhan	Director INTELLECTION	8702444 1372	bahakz@gmail.com
5	Dmitry Son	Head of Data Mining JS «Kaspi bank»	87012130920	dmitry.son@kaspibank.kz
6	Naizabayeva Lyazzat Kydyrgalievna	Senior scientific collaborator Institute of informational and computational technologies	87025492687	naizabayeva@mail.ru
7	Aniret Konysbaev	Director Special economic zone "Park of innovative technologies"	87015113030	amiret@mail.ru

Department of "CE&T"

No	Name	Position	Contacts	E-mail
1	Breusov Vladimir Yevgenyevich	President JSC "Astel"	87772111515	v.breusov@astel.kz
2	Bazhikeyev Aidyn Mukhamediyevich	The first deputy chairman of board JSC "Kaztelradio"	87022242122	bazhikeyev@gmail.com
3	Akhmedov Daulet Shafigulloovich -	Director of Institute of space thechnics and technologies	87057000756	lacp@mail.ru
4	Mishin Ilyas Vladimirovich -	Manager "Mobail Telecom Services" LLP	87072110901	ilyas.mishin@tele2.com
5	Sundetov Rustem Nurlanovich	Director 3D Lab LLP	87279833243, 87079899998	info@3dlab.kz

Department of "Mathematical and computer modeling"

No	Name	Position	Contacts	E-mail
1	Tanabayeva Gulzada	Chief specialist of department support of "First Credit Bureau"	87071270002	g.tanabayeva@gmail.com
2	Nurtaylakov Daniyar	Engineer of "Kcell" company	87012114515	nurtaylakov@gmail.com
3	Alzhanova Madina	Senior manager of "Halyk bank"	87774849384	dzheremy@gmail.com
4	Turarbekov Medet	Senior developer of Automation Department of Kaspi bank	87021399299	medet9299@gmail.com
5	Rysbayeva Korlan	Manager of Management Department of Intellectual Development Center "ADVANCE"	87059996967	k.rysbayeva@advancecenter.kz

Department of "Economics and Business"

No	Name	Position	Contacts	E-mail
1	Tsekhovoy Aleksey Philipovich	Union of Project Managers of Republic of Kazakhstan, President	87772177928	tsaf@list.ru
2	Ermakbayeva Klara Ergashevna	Eurasian Bank, Department director	87055353333	Klara.ermakbayeva@eubank.kz
3	Akhmetov Sain Izbasarovich	Training and certification center of IRU, Deputy Director	87772374767	Sain_Akhmetov@mail.ru
4	Shamshatova Farida	Fortebank, Senior specialist	87756373868	Fshamshatova@fortebank.com

Stakeholders

No	Name	Position	Contacts	E-mail
1	Dr. Askar Kussainov	Society of Kazakhstan IT Managers, Head of the Research and Education Committee	87777077788	akussainov@itmanagers.kz
2	Alexey Zhilenko	CIO Raimbek	7 701 7862993	alexey.zhilenko@raimbek.com

		Group FMCG		
3.	Sergei Maximov	Head of the Enterprise IT unit, Kcell JSC, Technologies-IT	7 701 2110752	Sergei.Maximov@kcell.kz
4.	Vadim Mun	Director, department of Distance bank service, Halyk Bank of Kazakhstan	+77772704572	vadimm2@halykbank.kz