

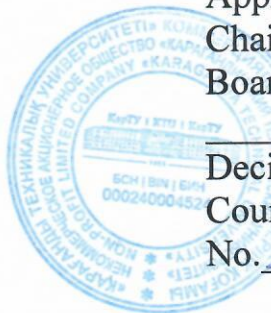
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Approved by  
Chairman of the Management  
Board - Rector of NLC "KTU"

M.K. Ibatov

Decision of the Academic  
Council

No. 3 « 11 » 10 2021



## **DOCUMENTED PROCEDURE**

### **DATA ANALYSIS. CONTINUOUS IMPROVEMENT OF THE EFFECTIVENESS OF QUALITY MANAGEMENT SYSTEM**

**KTU DP II – 03 – 2021**

**Developed by:** Compliance officer  
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**Karaganda**

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Effective date 2021.10.11.  
(year, month, day)

## 1 Scope

This documented procedure establishes a method, procedure and criteria of analyzing data in order to take actions aimed at continuous improvement of the effectiveness and efficiency of QMS, NLC “Karaganda Technical University” (hereinafter referred to as KTU) and interests of the customers.

This documented procedure is included in the documents of quality management system (QMS) and must be applied by all divisions of KTU.

## 2 Normative references

This documented procedure uses references to the following normative documents:

Standard of the Republic of Kazakhstan ISO 9001-2016 (ISO 9001:2015) “Quality Management System. Requirements”.

Standard of the Republic of Kazakhstan ISO 9000:2017 (ISO 9000:2015) “Quality Management System. General provisions and glossary”.

## 3 Terms, definitions and abbreviations

Terms, definitions and abbreviations are used in this documented procedure, according to the Standard of the Republic of Kazakhstan ISO 9000:

**Corrective action** is an action, taken to eliminate a reason of the detected discrepancy or another undesired situation.

**Preventive action** is an action, taken to eliminate a reason of the potential discrepancy or another potentially undesired situation.

**Quality policy** is general intentions and areas of the organization activity in the field of quality, officially formulated by senior leaders.

**Customer** is students, alumni and organizations that employ graduates of the university.

CQM&A – center of quality management and accreditation;

KTU – Karaganda Technical University;

QMS – Quality Management System;

DP – documented procedure;

QMR – quality management representative;

AC – Academic Council.

## 4 Responsibility and authority

4.1 This documented procedure (DP) is approved at the meeting of the Academic Council.

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4.2 A quality management representative (QMS) and a leader of the Center of quality management and accreditation (hereinafter CQM&A) are responsibility for introduction of the procedure.

4.3 A developer is responsible for compliance of the provisions of this document-ed procedure with requirements of the standard of the Republic of Kazakhstan ISO 9001.

4.4 The developer of this procedure is a Compliance officer, who is responsible for managing the procedure.

4.5 Responsibility for the organization and coordination of activity of the specific stages execution of the procedure and the quality of the final results are born by lead-ers of the divisions, who are participants of the specific stage fulfilment.

## **5 General provisions**

5.1 The senior leaders must analyze the organization’s quality management system in planned intervals to ensure its constant suitability, adequacy and effectiveness.

5.2 A data analysis should include an assessment of the opportunities for improvement and the need for changes of the organization’s quality management system, including a quality policy and quality objectives, as well as involvement of the leaders of all levels in the process of assessing the effectiveness and efficiency of processes, plans execution, and their analysis, development of the appropriate actions for the improvement.

5.3 The data analysis, for the purposes of improvement is carried out to assure the university leaders, that the quality policy accepted at the university is performed, the goals, set at the appropriate levels are achieved, the university’s quality management system functions properly.

5.2.4 All processes of the university’s QMS and related kinds of activity are analyzed by the leadership of the university in cases of:

- poor results of attestations;
- decrease of demand for provided educational services;
- worsening the quality of educational process and the decrease of knowledge level of the trained specialists;
- existence of complaints against trained specialists;

5.5 When analyzing the data, it is considered the issues related to:

- the efficiency of the corrective actions proposed during a previous analysis, made by the leaders;
- significant discrepancies, identified during internal audits, conducted during a period after the last analysis, made by the leaders;
- the significant discrepancies, specified in the reports of QMS checks, carried out by the customers of the university’s products (university entrants, students,

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documents, etc.) and other interested parties during the time after the last analysis, made by the leaders;

- the significant discrepancies, identified during surveillance audits and checks performed by superior organizations during the time from the last analysis, made by the leaders;

- proposals of improving the quality of the educational process, received from any interested party, including internal customers of the university;

- quality comments, provided for analysis by someone from employees;

- staff development;

- the usage of statistical control methods, as methods of the educational process improvement;

- current data of the complaints and discrepancies in order to identify trends and determine the need for any actions;

- information, received from the customers of the educational services, including their satisfaction;

- results of the resource requirements analysis;

- processes functioning;

- QMS functioning and evidence of its continuous improvement;

- the need to update the quality policy and a quality manual in general;

- changes, that could affect the QMS.

5.6 The main criteria for assessment of functioning the QMS are:

- stability of the educational process quality;

- increase of the number of successful and learning students, as a result of improving the quality of learning process;

- reduction of quantity and significance of the discrepancies;

- increasing the demand for university graduates;

- increased customer satisfaction.

5.7 The data analysis procedure includes the following:

- analysis of QMS functioning;

- devising solutions and development of proposals for improving the QMS;

- realization of decisions made by the university leadership and assessment of their efficiency.

## **6 Description of the procedure**

### **6.1 Data analysis for the purposes of improvement**

6.1.1 The data analysis for the purposes of improvement should be constantly carried out by the senior leaders, the Academic Council - AC and the leaders of the divisions during a year.

6.1.2 To make the data analysis for the purposes of improvement, the data is collected to obtain information about the customer satisfaction and / or dissatisfaction.

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6.1.3 The data analysis for the purpose of improvement is carried out on a regular basis by the leaders of the KTU divisions in the area of their competence during the year. A form of analyzing the goals of the KTU divisions is given in the Appendix A.

Improvement activities are planned and realized, based on the results of a systematic analysis made by the leaders.

#### 6.2 Requirements to measurement of the improvements

6.2.1 Measurements should have a clear and definite purpose.

6.2.2 Improvement goals should be:

- set for all divisions in the field of quality;
- closely related to common goals;
- measurable and controlled;
- aimed at satisfying customer needs;
- understandable for employees.

6.2.3 The improvement goals should:

- ensure the efficiency and effectiveness of the processes;
- regularly revise and show the changes of the customer needs.

6.3 The procedure of making improvements during the year.

6.3.1 The improvement activities are realized during the year in the form of:

- decisions of the Academic Council;
- activities, based on the results of internal audits;
- activities, based on the results of external audits, made by the customers and certification body;
- activities, based on the results of state attestation and accreditation of the university and specialities;
- activities, based on the results of annual analysis of functioning the quality management system, made by the leaders.

Table No. 1 – Data for obtaining the information about customer satisfaction and (or) dissatisfaction

Source of information	Frequency of information presentation	Person, being responsible for providing information	Who the information is provided to	Person, being responsible for providing improvement proposals
1 Complaints of the customers	On actual basis	Documentation office	Rector, quality management representative	Quality management representative, leaders of the divisions
2 Letters, fax of the customers	On actual basis	Documentation office	Rector, quality management representative	Quality management representative, leaders of the divisions
3 Personal communi-	On actual ba-	Academic teach-	Rector,	Quality management



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cation with a customer	sis	ing staff and leaders of the divisions	quality management representative	representative
4 Results of the sociological research	As per the results of questionnaire	Leaders of the divisions	Rector, quality management representative	Leader of the group

The results (outcomes) of the data analysis should include solutions and actions related to:

- opportunities for improvement;
- all necessary changes of the quality management system;
- resource requirements.

Information, based on the results of the QMS analysis, is used to make a plan of improving the quality management system. Quality goals are formed for the next year, based on the QMS analysis.

The table No. 3 shows the requirements to output data.

Table No. 3 – Output data

Name of the document	Responsible person	Participant	A person, who receives information	Place of storage
1 Minutes of meeting of the Academic Council	Quality management representative, scientific secretary	Members of the Academic Council	Rector	Scientific secretary
2 Analysis, made by the leaders	Quality management representative	Leaders of the divisions	Rector	Accreditation and Quality Management Center

## 7 Coordination and implementation

This documented procedure is agreed in accordance with the KTU DP II-01 and is drawn up in the “Coordination sheet” (Appendix B).

## 8 Replication and document sending

Replication and sending this documented procedure must be carried out in accordance with the KTU DP II-01.

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## **9 Storage**

This documented procedure must be kept in accordance with KTU DP II-01.

## **10 Making changes to the document**

Making modifications in this documented procedure must be carried out in accordance with the KTU DP II-01.

## **11 Removal and withdrawal of the document**

Cancellation and withdrawal of the document of this documented procedure must be carried out in accordance with KTU DP II-01.

## **12 Ensuring accessibility**

Ensuring availability of this documented procedure must be carried out in accordance with KTU DP II-01.



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Appendix A  
(mandatory)

F. DP-II-03-01

**ANALYSIS OF THE GOALS FULFILLMENT in the field of quality**

Divisions “\_\_\_\_\_” for 20\_\_\_\_ - 20\_\_\_\_

Content of the division’s objectives	Execution	Reasons of non-fulfillment	Timeframes of the reason elimination	Person, being responsible for elimination

Discussed and approved at the meeting of the division

“\_\_\_\_\_” minutes No. \_\_\_\_\_ dated \_\_\_\_\_ 20\_\_\_\_

Person, being responsible for quality

\_\_\_\_\_  
(full name), signature

Leader of the division

\_\_\_\_\_  
(full name), signature



