

NAZARBAYEV UNIVERSITY

FOLLOW-UP EVALUATION REPORT

July 2019

Team: Georg Schulz, Chair Erdal Emel Inguna Blese Christina Rozsnyai, Team Coordinator

Contents

1.	Introduction	3
2.	Governance and institutional decision-making	7
3.	Quality culture	9
4.	Teaching and learning	. 11
5.	Research	. 13
6.	Service to society	. 15
7.	Internationalisation	. 16
8.	Conclusions	. 17

1. Introduction

This report is the result of a follow-up evaluation of Nazarbayev University (NU), Republic of Kazakhstan. The Institutional Evaluation Programme (IEP) of the European University Association (EUA) originally evaluated NU in 2017 and the report was submitted to the university in August 2017. In 2018 the university requested that IEP carry out a follow-up evaluation.

1.1 Institutional Evaluation Programme and follow-up evaluation process

IEP is an independent membership service of EUA that offers evaluations to support the participating institutions in the continuing development of their strategic management and internal quality culture. IEP is a full member of the European Association for Quality Assurance in Higher Education (ENQA) and is listed in the European Quality Assurance Register for Higher Education (EQAR).

In line with the IEP philosophy as a whole, the follow-up process is a supportive one. There is no prescribed procedure, and it is for the institution itself to set the agenda in the light of its experiences since the original evaluation. The institution is expected to submit a self-evaluation report, which will describe the progress made and indicate new and ongoing barriers to change.

The rationale is that the follow-up evaluation can assist the institution in evaluating the changes that have been made since the original evaluation: What was the impact of the original evaluation? What use has the institution made of the original evaluation report? How far has it been able to address the issues raised in the report? The follow-up evaluation is also an opportunity for the institution to take stock of its strategies for managing change in the context of internal and external constraints and opportunities.

As with the original evaluation, all aspects of the follow-up process are also guided by four key questions, which are based on a "fitness for (and of) purpose" approach:

- What is the institution trying to do?
- How is the institution trying to do it?
- How does the institution know it works?
- How does the institution change in order to improve?

1.2 NU's profile

The Republic of Kazakhstan has been experiencing a fundamental transformation since it became an independent state following the dissolution of the Soviet Union in 1991. Seeing the Bologna Process as a model for its higher education structure, the country joined the European Higher Education Area as its 47th member in 2010. Higher education plays a key role in the national transformation strategy by aiming to produce progressive leaders of society for the 21st century.

NU was established as a model university in 2010, four years after the first President of the Republic of Kazakhstan, Nursultan Nazarbayev, announced in his annual address to the nation his plan to create "the first research and world-class university in Kazakhstan" (Self-evaluation Report 2017, p.1). The NU mandates are:

- "Educational reform leadership to ensure that the lessons of NU's experience are transferred to and understood by other universities, schools and research centres in Kazakhstan.
- Academic excellence to achieve NU's mission by developing and maintaining academic excellence.
- Research excellence to develop a faculty-led programme of world-class research and to be a partner with the world's best researchers and research institutes.
- Creating an integrated academic healthcare system to establish a healthcare system that will provide a model for healthcare services throughout Kazakhstan.
- Innovation and translating research into production to become Kazakhstan's main driver of innovation, leading the way for Nur-Sultan to become a regional innovation hub.
- NU's engagement with the public sector and industry NU actively collaborates with government, industry and international organizations to support national and other important initiatives" (NU brochure 2018 p. 1).

In order to ensure the success of its mandate, NU was given a unique legal status with a separate law granting it institutional autonomy and academic freedom, as well as instituting a Board of Trustees within a governance structure independent from the Ministry of Education and Science. NU is not required to seek licensing via accreditation by the national agencies but in addition to the IEP evaluations, some programmes are applying for international accreditation. NU is free to recruit and select students according to its own requirements. NU "accommodates about five thousand students, out of an overall student population of roughly half a million individuals" (EUA Report "Transition to University Autonomy in Kazakhstan"¹, p. 37).

Moreover, the university receives a generous budget from the state, which made up around 91% of its total funding in the past four years, according to Appendix I of the NU Self-evaluation Report 2019 (hereafter referred to as the SER). During its site visits in 2017 and 2019, the IEP evaluation team (hereafter referred to as the team) heard that NU's budget makes up around 20% of the total state budget for higher education. At the same time as NU's establishment, a

¹ https://www.eua.eu/resources/publications/810:transition-to-university-autonomy-inkazakhstan.html

"Nazarbayev Fund" was set up as an endowment with donations from multinational companies. The Fund is managed independently from NU and it can use the income from the investments at its discretion.

NU was established through a scheme in which the initial project group formed partnerships between NU and universities in the UK, the US and elsewhere. The partners' task was to help design the university structure and its first study programmes, and to bring academic staff to NU. These strategic partnerships continue with most schools (as faculties are referred to, in line with the US model) being linked to an international university. The list of partners has also expanded to other countries and continents. They include the University of Cambridge, the University of Wisconsin-Madison and the National University of Singapore and, as research partner, the University of Pittsburgh, to name a few.

NU has eight schools, but is preparing a merger of the School of Science and Technology with the School of Humanities and Social Sciences in autumn 2019. Other schools are Engineering (now the School of Engineering and Digital Sciences) merged with parts of the former School of Science and Technology), and Mining and Geosciences. The Graduate School for Education, a private entity, will merge into the university. The university works with research centres that are part of the Private Institution "National Laboratory Astana": the Centre for Energy and Advanced Materials Science and the Centre for Life Sciences.

In autumn 2018, a total of 4 030 students (2 948 undergraduates, 1 082 graduates) were enrolled in NU, an increase from 3 514 students in 2017. Another 754 students are in the Centre for Preparatory Studies, which prepares students for enrolment at NU, where teaching is in English, by focusing on English courses. The SER and NU's Strategy 2018-2030 state that the student population is planned to level out at around 10 000 by 2030, which was confirmed to the team during its site visit. As of 2018, 99.8% of undergraduate and 97.9% graduate students were Kazakhstani citizens, with 93.9% and 90.3% Kazakhs and 6.1% and 9.7% respectively from among the over 100 other ethnic groups in the country. The undergraduate male-female ratio remains stable at basically 1:1, slightly shifting to 42.1% female and 57.9% male for graduate students. Tuition is free for most undergraduate and graduate students through scholarship schemes. Undergraduate retention is 90.8% by the fourth year, with 88.7% graduating. Graduate retention is 90.5%.

The academic staff numbered 363 as of autumn 2018. Unlike the student population, the majority of academic staff are expatriate, although the team heard that the share has reduced slightly from the 78% in 2017. They are predominantly from North America but also from Europe, Asia and Australia. NU administrative staff are almost all Kazakhstani, but many of those in higher administrative positions have international experience.

NU is situated in Nur-Sultan City, recently renamed from Astana, "the capital" established in 1998. The university comprises a sprawling modern building complex with possibilities for expansion. It includes teaching and research facilities as well as student dormitories, faculty

housing, and sports, recreation and service facilities. Some 80% of students live on campus. A new Technopark next to NU is being expanded.

1.3 The evaluation process

NU set up a steering committee following the 2017 IEP evaluation to discuss the recommendations made in the evaluation report. They set up 13 working groups for the areas in which changes were to be implemented, which proceeded by consulting broadly among the university's internal stakeholders. In August 2018 they submitted a Progress Report to IEP. The self-evaluation process for this follow-up evaluation was carried out by a committee of 13 academics, leaders of NU and representatives of some of its units, administrative staff and students. The committee based its work on the 2017 IEP recommendations, the 2018 Progress Report, and the NU Strategy 2018-2030, which also gained impetus from the 2017 IEP report and was approved by the NU Board in December 2018. Furthermore, the 2019 SER reflected new projects and achievements and the committee also developed an action plan to stake out the process for implementing improvements.

The SER elaborates on how far each recommendation from the 2017 evaluation has been implemented, grading the actions from "Limited progress made" (13 recommendations) to "Good progress made" (10 recommendations) to "Complete" (6 recommendations). The team appreciated the frank and honest self-assessment of NU's achievements in the SER. It also appreciated the systematic way with which the 2017 recommendations have been followed up and NU's critical approach in identifying the level of progress and further actions needed.

The SER of NU, together with the appendices, was sent to the evaluation team in March 2019. The visit of the evaluation team to the university took place on 21-24 May 2019.

The evaluation team consisted of:

- Georg Schulz, former rector, University of Music and Performing Arts, Graz, Austria, Chair
- Erdal Emel, former vice-rector, Uludağ University, Turkey
- Inguna Blese, student, University of Latvia
- Christina Rozsnyai, Hungarian Accreditation Committee, Team Coordinator.

The team thanks the leadership and staff of NU, and in particular President Shigeo Katsu, Provost Ilesanmi Adesida, Director Duncan Priestly and contact person Aizhan Mussina, for the informative and self-critical SER, the openness of everyone interviewed during the site visit and the kind hospitality with which the team was received.

2. Governance and institutional decision-making

In its strategy discussions, NU decided to keep its existing vision until 2025: "to give Kazakhstan and the world the scientists, academics, managers and entrepreneurs needed to prosper and develop". The mission will also remain in place until that time: "to be a model for higher education reform and modern research; to contribute to the establishment of Astana as an international knowledge, innovation, and medical hub; and to prepare students for a world of increased volatility, uncertainty, complexity and ambiguity". The vision and mission reflect the raison d'être of NU and the responsibility it bears for driving the transformation of higher education in Kazakhstan. With its mandate for "educational reform leadership", NU has been active in offering workshops to various external stakeholders, including leadership seminars for top administrators at other universities. Several other universities in the country have recently been granted some autonomy with a supervisory board structure modelled on NU. A "League of Integrity" of 25 universities has been established with input from NU, although NU has not yet formally joined the group; the team noted again in its follow-up visit, the central role that integrity plays in the mission and brand of NU. The team acknowledged once again that meritbased student admission and human resource management at NU is commendable. The team praises NU for establishing a model institution in Kazakhstan and hopes that it can serve as a role model for other higher education institutions as they go through structural reforms in the years ahead.

NU has made strides in another of its mandates, working towards "creating an integrated academic healthcare system", which ranges from providing medical care to fostering leadership expertise. The School of Medicine currently operates three hospitals, providing medical services for citizens. In the area of leadership, the team heard that the school provides professional development seminars for the senior leadership of medical universities. With its direct links to the community through its health facilities, where communication with patients is necessary, the ratio of local to foreign staff is higher than the rest of NU, at roughly 1:1.

The SER describes a number of organisational changes that NU has implemented in the past two years. They have implications for management, teaching and learning, research and administration and seem to have succeeded in streamlining various processes. The team commends the set-up of the transformation process and was impressed by the commitment shown by NU stakeholders. The fast pace of reforms is a challenge for all involved, but it is coupled with an awareness of the need for quick change. The sustainability of NU was the team's primary concern in 2017, and NU is well aware of the challenge of balancing the speed of reforms with the need to ensure that the internal stakeholders are all on board. Therefore, the team would like to make only one recommendation pertaining to financial sustainability, that NU continues to put effort into diversifying income streams to gradually reduce dependence on the state budget.

NU developed an implementation plan for the Strategy 2018-2030. It will be monitored at the institutional and the school or unit level, supported by data compiled and presented by Institutional Research and Analytics, a unit that was planned in 2017 and is now operational.

The team recommends that NU refines its monitoring and evaluation methods with the help of data gathered to check "how do you know it works" when formulating plans for moving forward.

The team noted the good progress made with the formulation of the strategy and goals as well as the constructive communication with internal stakeholders in the process. It would like to emphasise the need for sustaining efforts in communication in order to maintain stakeholder commitment towards implementing the strategic goals. The team noted that NU identified in its SER that further work is needed in this area and itself heard complaints about insufficient communication regarding upcoming changes in several interviews during the site visit. Therefore, the team recommends NU to *take care to ensure communication and information flow regarding changes to all internal stakeholders.* This is especially critical for the groups that will be specifically involved in or affected by the planned changes.

Relations with external partners have progressed. The team noted that links with the original American partners, established for setting up the NU schools, developing curricula and recruiting faculty, are losing their momentum now that the initial objective is accomplished. The team agrees with NU's assessment in the SER that partnerships should move to the next level in order to evolve into a more balanced relationship with collaborative projects and publications. The team especially recommends *strengthening the emphasis on collaborative research in order to take partnerships to a new level*.

As far as the once fledgling IT system is concerned, the team acknowledged that the positions of Chief Information Officer and General Director of IT Projects have been filled. It is now urgent to implement an efficient, institution-wide IT system, taking into consideration existing systems, such as that in the Graduate School of Business, and one into which the Institutional Research and Analytics data system is integrated. The team recommends *creating a university-wide, coherent information system that is accessible to different users on different levels but with common elements*. This would include a university-wide internal communication and management IT system (intranet).

3. Quality culture

The team commends NU for its achievements in developing many internal and external quality assurance mechanisms. The team also noted the continuing commitment of NU's stakeholders to the ongoing improvement of the quality of NU's activities.

Concerning the internal quality assurance system, the team appreciated the collated set of documents relating to quality assurance. The Academic Quality Framework was already in place in 2017 and, along with related documents, lays out how to maintain the standards of academic awards. The annual Quality Enhancement Plans, the latest of which was approved by the NU Academic Council in March 2019, are concrete action plans with timelines and responsibilities for reviewing and continuously improving learning and teaching-related activities. NU also regularly requests feedback from students about their learning experience, conducts staff satisfaction surveys, and consistently follows up on the feedback received. The Institutional Research and Analytics Unit, mentioned in the previous chapter, has started running along a clearly defined operating framework, described in the SER, and it will produce data and analyses needed for quality enhancement.

The team received in a separate appendix to the SER a table on NU's compliance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), which aligns NU's operational documents with the individual standards in Part 1 of the ESG, which relates to internal quality assurance. The team appreciates the integration of the ESG into NU's quality assurance as a sign of its commitment to the Bologna Process. It recommends revisiting the table and comparing it to the ESG guidelines item by item in order to improve the alignment between the two and to identify features that are still missing. NU should build on the ESG as a quality assurance instrument and aim for a comprehensive quality culture. A good starting point would be to develop an overarching quality assurance strategy that covers all NU units and activities, not only academic ones, extending also to management and administration. The team recommends continuing the shift from quality assurance to an institution-wide quality culture. The sharing of good practices, such as the ground-up initiatives that include peer-to-peer observation, described in the SER, could be standardised in the quality strategy in order to facilitate synergies within and between schools and units. Furthermore, the team recommends making internal quality documents easily accessible on the NU website in order to give more prominence to quality assurance matters in the university's public communication.

With respect to the external quality assurance of NU, the team commends the university's use of the IEP recommendations from the 2017 evaluation, its thorough progress report, and the SER for this follow-up evaluation. The team also learned that several NU programmes have undergone or are preparing for evaluation and accreditation by international agencies such as ABET, EAPAA or WFME. The team supports such efforts by recommending that NU *continues to seek international accreditation of programmes and schools in order to continuously enhance the quality of teaching and learning as well as increase international visibility.* The university quality assurance strategy mentioned above is also important in relation to external quality assurance. While aiming at various professional accreditations of schools and programmes, the team recommends ensuring a shared understanding of quality and that the institutional-level overarching quality standards are observed.

4. Teaching and learning

NU described a number of advances regarding teaching and learning in the SER. Among these, NU has assigned an Associate Provost for Graduate Studies to develop a graduate studies portfolio and framework and to run the scheme. During the site visit, the team was impressed with the good facilities for teaching and learning; there are special classes for group work as well as separate rooms and equipment for students' individual work. Furthermore, the team received the regulatory framework for undergraduate programmes, which includes the newly implemented core curriculum, as an appendix to the SER. The team commends the implementation of the new core curriculum, which ensures an all-round education for students as well as offering the possibility for personal enrichment through various elective courses. However, the team recommends *ensuring a broad choice of elective courses for students in order to avoid forcing them to take subjects they find irrelevant only to fill their required workload*. Furthermore, the team heard that programme-specific courses that are also offered as electives have been inaccessible to students from other disciplines. Therefore, the team recommends *ensuring that the content level in elective courses is understandable for students from other fields*.

New teaching methods are being shared among the academic staff and their application is rewarded. The team recommends *exploring all facets of student-centred learning and its implications for teaching tools and student responsibilities*. The concept of student-centred learning, as outlined in the ESG (standard 1.3), goes beyond stimulating interactive learning and extends to the proactive attitude of students who are aware that they are laying the groundwork for their future careers. In the team's interviews during the site visit, some students mentioned a lack of flexibility in their study process, particularly with regards to internships, e.g. fixed time for internships, which is sometimes difficult to manage with business needs and expectations; limitations to choosing internships abroad, etc. It appeared that not all students at NU are provided with proper guidance and tutoring to plan their own learning process and career path. Therefore, the team recommends *strengthening the entrepreneurial mind-set in the curriculum and incorporating a suitable volume of practical work* carefully planned to allow students to apply acquired knowledge and skills. Such measures are especially important in light of the increasing need for life-long learning that new generations will need to pursue, and for which they must be equipped with the necessary skills.

The SER outlined that NU has set up a Long-Term Employment Contracts Working Group that has carried out a survey among staff on what improvements they would like to see. Progress has been made in implementing some measures, while others remain a challenge. NU's support for teachers' continuous professional development, such as through the scheme conducted in collaboration with the Higher Education Academy in the UK (renamed "Advance Higher Education" in 2018), is also noteworthy. In order to retain capable staff, the team recommends *ensuring the continuing attractiveness of academic positions in the long term, not only by financial means but also through measures that support quality-of-life.* In addition, it recommends *considering making career paths more predictable by continuing to discuss the*

possibility of tenure, and the system of contract renewal with transparent criteria, among other measures.

5. Research

The team recognises the achievements made in research management. The Vice-Provost for Research was appointed shortly after the 2017 IEP evaluation, although the team at the time had been able to meet him and discuss his plans. The transformation of institutional activities concerning research, including the elaboration of a research strategy, are in progress and the communication channels with stakeholders are open. In this regard, the team recommends to *systematically involve academic staff in developing the research strategy to ensure inclusiveness and transparency, but also to help identify key issues*.

While procurement of research equipment and supplies remains a challenge overall, the team saw good developments regarding new facilities, buildings, and equipment acquisition. New research centres are being integrated into NU, rather than acting as separate entities with the status of national centres that collaborate with the university, as was previously the case. Collaboration with the existing centres that are not part of the university is being stepped up. In line with the strategic goal of the country's former president, Nursultan Nazarbayev, the development of smart systems and artificial intelligence is being supported through the establishment of a dedicated new research centre at NU. The Technopark mentioned in the introductory chapter, as well as other research transfer setups and business facilities, are being expanded in order to support NU in fulfilling its mandate to spearhead innovation and translate research into production.

The SER describes numerous initiatives and achievements in research. Equally commendable are the efforts NU has made and continues to make towards attracting students back from abroad as well as the establishment of post-doctoral positions. Finding additional resources for more positions remains a goal. Good efforts and initiatives have also been made to facilitate interdisciplinarity and collaborations between NU schools.

NU has taken steps to streamline administration that supports research, including setting up the Office of Research Administration, whose mandate goes beyond administrative support to proactively seeking research opportunities for the academic and research staff.

At the same time, diverse demands on administrative and academic staff are still posing challenges. The team believes that with the advance of the transformation process, supported by the forthcoming overarching research strategy, a mutual understanding of common goals for NU, in alignment with the national goals, can be achieved.

In order to advance NU's endeavours towards achieving research excellence on an international level, the team recommends *focusing research on areas of excellence where NU is unique; where national priorities have been identified; and where grants are being made available*. Aligning research with national priorities would also underpin NU's lobbying for raising the percentage of GDP available for research from 0.15% to 1%, a plan the team heard about in interviews during its site visit.

Taking into consideration the approach of attracting researchers who correspond to the priority areas as well as outstanding researchers who are talented in other areas, the team recommends *ensuring that the latter are also sufficiently supported in their individual research*.

Furthermore, as NU is maturing, the team recommends *considering renewing relationships with existing foreign partners*, as mentioned already in the chapter "Governance and institutional decision-making", *after evaluating their achievements together with staff and students*. Possible areas of cooperation might be to develop projects that foster cooperative research, i.e. organising conferences, co-authoring publications, holding workshops etc., rather than the current partner relationships that are limited to service agreements.

6. Service to society

NU's services to society are inherent in its mandate and mission. The achievements the team learned about during its site visit are commendable regarding on the one hand, specific activities, e.g. medical services for the general public, and on the other hand the external dissemination of the NU model in a number of areas. The latter includes workshops on curriculum development, innovative teaching methods and leadership; professional development for academic staff of other higher education institutions; and lobbying the government in the interest of all higher education institutions in Kazakhstan. Many further initiatives are listed in the SER. One project, in line with a key NU mandate to "create an integrated academic healthcare system" has been launched as the country's first comprehensive academic medical centre by the School of Medicine, the University Medical Centre and the Centre for Life Sciences, in collaboration with an American partner.

The SER considers that NU has made good progress in the area of service to society. Notably, NU has developed an overarching strategy (currently in draft form) to coordinate the related activities of schools and units, and which links to national higher education priorities and strategic goals. NU is actively involved with other higher education institutions in the country on a number of projects, including the dissemination of good teaching practices and professional development programmes. One project related to NU initiatives is the "League of Integrity" for Kazakhstani universities, mentioned in the introduction, and the team found it commendable how NU is able to act as a role model and promote academic integrity.

NU's mandate for "Innovation and translating research into production", together with "Engagement with the public sector and industry" extend to embedding the university's research activities into the business and industry community. In this area, the team noted possible risks, such as potential brain-drain due to graduates going abroad, or a decrease in applicants for new start-ups. It therefore recommends *sustaining efforts to support start-ups* by offering dedicated funding to attract a steady flow of applicants. Coupled with that, the team recommends *supporting an entrepreneurial mentality as well as an ecosystem conducive to innovation and individual initiatives among its students in order to equip them for investing in entrepreneurial activities in the country to prevent brain-drain.*

The team supports NU's many efforts and consequently recommends *making the existing and future services known to the external community in order to establish them as part of the NU brand*. The "Annual Media Plan" described in the SER is a good initiative to sustain awareness of NU's initiatives and services among partners and the public, which is a precondition for successfully disseminating good practices.

7. Internationalisation

NU has made great strides in channelling into action its numerous international activities, many of which are listed in the SER, by starting discussions on an internationalisation strategy, in line with the university strategy.

The university's goal is to increase the proportion of international students from what is currently below 1%, to 9-10% by 2025, and to 12% by 2030, when the total student body is projected to level off at 10 000, as laid down in the NU Strategy 2018-2030.

The team heard that NU is making efforts to recruit students via its presence at student fairs and conferences in many countries, and that a recruitment plan is already in place. A social services package for international students is in place already. Thus organisational and structural efforts for attracting and supporting international students are commendable. The SER notes that a new marketing strategy geared towards recruiting foreign students is to be launched in 2019. The team believes that additionally, more creative actions to attract a large number of international students over the coming years could be explored, including a critical reflection of outcomes from different experiences and best practices at schools. As an incentive for applicants, the team recommends *identifying areas of attractiveness specific to NU*.

In addition, the team recommends *continuing to seek international accreditation,* as noted earlier, *also with the aim of making NU more attractive to international students*.

Efforts to attract international post-doctoral students are a promising development for internationalisation as well as providing potential for expanding research capacity. Recognising that this is a newly introduced scheme that will be refined with time, the team recommends *creating an inclusive environment for international students at NU, including post-doctoral students, by ensuring that they are individually cared and supported in integrating into campus and city life.*

NU is also promoting student and staff mobility through various schemes, including its existing partnerships and the Erasmus+ programme. The team recommends *fostering mobility for students and staff by considering a mobility programme with NU's target countries, e.g. the Asian Universities Alliance, and by exploring possibilities for Erasmus+-type mobility schemes in the region.*

Finally, international partnerships with high-class universities are well suited for expanding internationalisation in several areas. The team recommends *building on existing initiatives but also considering strategically how to publish and advertise job openings for academic staff, including post-doctoral students, in order to sharpen the focus of these efforts and to reach international audiences, as well as to optimise resources.* NU may wish to explore EURAXESS² and similar internationally recognised platforms for recruiting academic staff and researchers.

² https://euraxess.ec.europa.eu/my

8. Conclusions

The team commends NU for the changes it has planned and implemented since 2017. The inclusiveness with which NU proceeds in managing change is particularly praiseworthy. The production of the SER, preceded by strategic working groups, is a case in point. Many of the recommendations from the 2017 IEP evaluation have been followed up and the team appreciates that NU is self-critical about further actions needed. Still, it is necessary to sustain the efforts even in areas where NU has already achieved a great deal. At the same time, the team believes NU has to transform itself from being an institution carrying out its immediate mandate to one with a long-term mission and strategy that stakes out its sustainable development in order to achieve the next step in its advancement.

The team is assured that by building on the areas NU identified in its SER, the university can progress in the right direction. The team hopes that its recommendations will help to guide NU to meet the challenges ahead.

Summary of the recommendations

- 1. Continue to put effort into diversifying income streams to gradually reduce dependence on the state budget.
- 2. Refine monitoring and evaluation methods with the help of data in order to check "how do you know it works" when formulating plans for moving forward.
- *3.* Take care to ensure communication and information flow regarding changes to all internal stakeholders.
- 4. Strengthen the emphasis on collaborative research in order to take partnerships to a new level.
- 5. Create a university-wide, coherent information system that is accessible to different users at different levels but with common elements.
- 6. Revisit the table on compliance with the ESG 2015 Part 1 and compare it to the ESG guidelines item by item in order to improve the alignment between the two and to identify features that are still missing.
- 7. Continue the shift from quality assurance to an institution-wide quality culture.
- Continue implementing the international accreditation of programmes and schools in order to enhance the quality of teaching and learning as well as to increase international visibility.

- 9. In aiming at various professional accreditations of schools and programmes, ensure a shared understanding of quality and that the institutional-level overarching quality standards are observed.
- 10. Make internal quality documents easily accessible on the NU website.
- 11. Ensure a broad choice of elective courses for students in order to avoid forcing them to take subjects they find irrelevant only to fill their required workload.
- *12.* Ensure that the content level in elective courses is understandable for students from other fields.
- 13. Explore all facets of student-centred learning and its implications for both teaching tools and student responsibilities.
- *14.* Strengthen the entrepreneurial mind-set in the curriculum and incorporate a suitable volume of practical work.
- 15. Ensure the continuing attractiveness of academic positions in the long term, not only by financial means but, also through measures that support quality-of-life.
- *16.* Consider making career paths more predictable by continuing to discuss the possibility of tenure, and the system of contract renewal with transparent criteria, among other things.
- 17. Systematically involve academic staff in developing the research strategy in order to ensure inclusiveness and transparency, but also to help identify key issues.
- *18.* Focus research on areas of excellence where NU is unique as well as those where national priorities have been identified and where grants are being made available.
- 19. Align research with national priorities in order to underpin NU's lobbying for raising the percentage of GDP for research from 0.15% to 1%.
- 20. taking into consideration the approach of attracting researchers who correspond with priority areas and researchers who are talented in other areas, ensure that the latter are sufficiently supported in their individual research.
- 21. As NU is maturing, consider renewing relationships with existing foreign partners after evaluating their achievements together with staff and students.
- 22. Sustain efforts to support start-ups by offering dedicated funding to attract a steady flow of applicants.
- 23. Support an entrepreneurial mentality as well as an ecosystem conducive to innovation and individual initiatives among its students in order to equip them for investing in entrepreneurial activities in the country to prevent brain-drain.

- 24. Make existing and future services known to the external community in order to establish them as part of the NU brand.
- 25. Foster mobility for students and staff by considering a mobility programme within NU's target countries, e.g. the Asian Alliance, and explore possibilities for Erasmus+-type mobility schemes in the region.
- *26.* In order to attract a large number of international students in the coming years, identify areas of attractiveness specific to NU.
- 27. Continue to seek international accreditation also with the aim of making NU more attractive to international students.
- *28.* Create an inclusive environment for international students at NU by ensuring that they are individually cared for and supported in integrating into campus and city life.
- 29. Build on existing initiatives but consider strategically how to publish and advertise job openings for academic staff, including post-doctoral students, in order to sharpen the focus of these efforts and to reach international audiences, as well as to optimise resources.