UiO : Det matematisk-naturvitenskapelige fakultet
Universitetet i Oslo

Til: MN- fakultetsstyret

Sakstype: Orienteringssak
Saksnr.: 20/14
Møtedato: 13.10.14
Notatdato: 1.10.14
Saksbehandler: Jarle Nygard

Sakstittel: Rapport fra Strategic Advisory Board

De viktigste problemstillingene:

I september 2012 oppnevnte UiO et internasjonalt rådgivningspanel - Strategic Advisory Board for en periode på to år for å få råd om hvordan universitetet skal nå de strategiske mål som er formulert i Strategi 2020. SAB leverte sin rapport til rektor i august 2014. Rapporten var en hovedsak på et møte/seminar i universitetsstyret 11. september.
Styret fattet følgende vedtak om hvordan UiO skal forholde seg til og følge opp de rådene som SAB gir.

«1) Styret er takknemlig for det arbeidet Strategic Advisory Board har utført og rapporten som er levert og presentert.

2) Styret vil benytte rapporten som grunnlag for å tydeliggjøre prioriteringer og sikre gjennomføringskraft.

3) På bakgrunn av diskusjon og gruppearbeid bes administrasjonen om å komme tilbake til styret med fremlegg av
forslag til prioriterte forbedringsområder.

4) Styret ber administrasjonen utvikle forslag til design av arbeids- og beslutningsprosess som er:
- åpen
- helhetlig
- inkluderende
- bygger på eksisterende analyser og strategi/årsplan

og som bidrar til å skape engasjement for forbedringsarbeidet, og klargjøre ansvar for gjennomføring.»

Forslag til vedtak: *Fakultetsstyret tar rapporten fra Strategic Advisory Board til orientering*

Vedlegg: Rapporten "Build a Ladder to the Stars"

To Rector Ole Petter Ottersen

The Strategic Advisory Board was given a mandate to review and assess the performance of the University of Oslo in the light of the ambitions and goals outlined in *Strategy 2020,* and, if appropriate, to propose alternative initiatives. In the letter of mandate dated November 6th 2012, UiO asked for perspectives and feedback on three issues in particular:

- Assess UiO's current characteristics, capabilities, and performance levels on an international scale.
- Assess the ambitions and visions in *Strategy 2020*. What are realistic and achievable goals for 2020?
- Identify gaps in *Strategy 2020* and recommend further action.

The SAB has now finished its work and we have summarized our evaluation in the enclosed report. Our analyses, assessments and recommendations are designed to both support efficient execution of the current strategy and set priorities for future reforms.

Esko Aho

Chairman of the UiO Strategic Advisory Board

Peter Agre

Toril Moi

Shaheen Sardar Ali

Erwin Neher

Frans van Vught



Build a Ladder to the Stars

Report from the University of Oslo's Strategic Advisory Board 2012–14

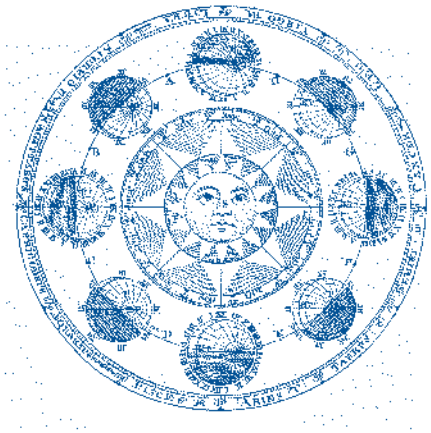
UiO : University of Oslo

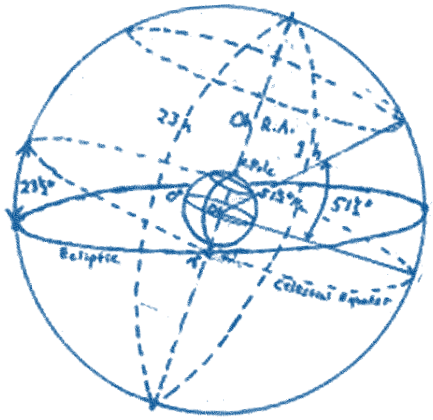
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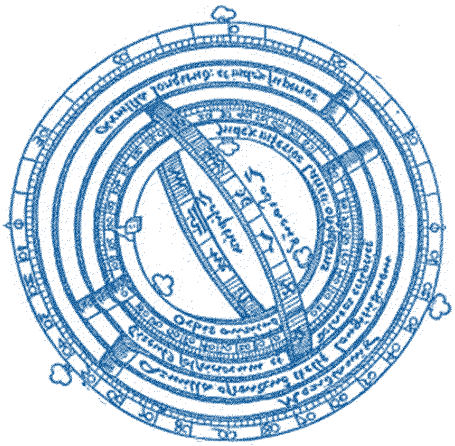


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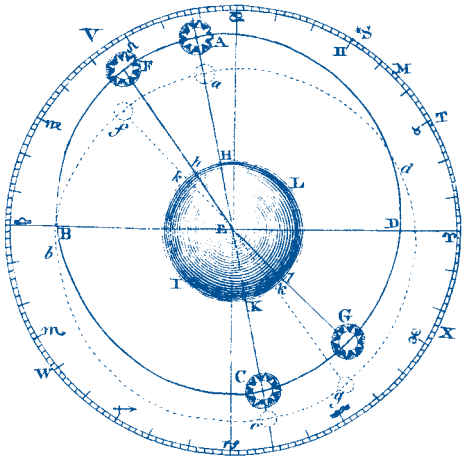
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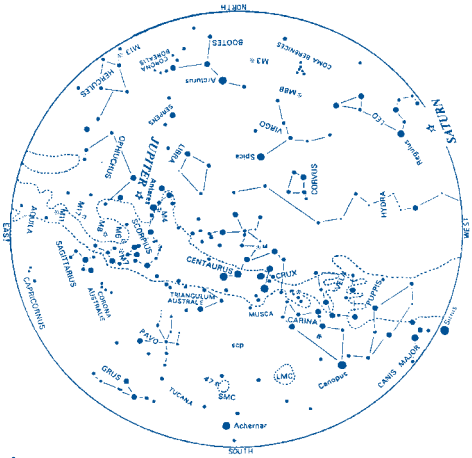
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PREAMBLE: THE INTERNATIONAL STRATEGIC ADVISORY BOARD (SAB)

Background and Charge

The University of Oslo´s (UiO's) ambitious *Strategy 2020* aims to increase UiO´s international visibility as a leading research-intensive university by 2020.

In September 2012, following a decision made by the University Board, and in keeping with the University's Action Plan for Internationalization, the University appointed an international *Strategic Advisory Board (SAB)* for a period of two years and asked it to advise UiO on how best to fulfil the ambitions set out in its strategic plan. For details, see the attached charge.

The following were named to the SAB:

- Esko Aho (Chair), Former Prime Minister of Finland; Finland.
- Peter Agre, Professor, Johns Hopkins University; Nobel Prize in Chemistry 2003; USA.
- Shaheen Sardar Ali, Professor of Law, Warwick University, UK; Member, United Nations Working Group on Arbitrary Detention; Pakistan/Britain.
- Toril Moi, James B. Duke Professor of Literature and Romance Studies, Professor of English, Philosophy and Theater Studies; Director of the Center for Philosophy, Arts and Literature (PAL), Duke University; Norway/USA.
- Erwin Neher, Professor Emeritus, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany. Nobel Prize in Physiology or Medicine in 1991; Germany.
- Frans van Vught, Rector Emeritus, University of Twente; High-level advisor European Commission; The Netherlands.
- Gayatri Chakravorty Spivak, University Professor and Founding Director of the Institute for Comparative Literature and Society, Columbia University; India/USA. While Professor Spivak accepted the invitation to serve, she was unfortunately unable to participate in the work of the committee.

The SAB was charged with reviewing UiO's progress, performance and initiatives in the light of the goals outlined in *Strategy 2020,* and, if appropriate, to propose alternative initiatives. In particular, UiO asked for perspectives and feedback on three issues:

- Assess UiO's current characteristics, capabilities, and performance levels on an international scale.
- Assess the ambitions and visions in *Strategy 2020*. What are realistic and achievable goals for 2020?
- Identify gaps in *Strategy 2020* and recommend further action.

Working Method and Meetings

We began by working on a broad scale, asking questions about the strengths and weaknesses of UiO considered in a Norwegian, Nordic, and global context. After each site visit we wrote an internal

working paper in which we summarized our observations and analyses, formulated some tentative findings, and identified further relevant questions in preparation for the next visit. The key part of each site visit was the time devoted to wide-ranging conversations with different groups of stakeholders.

However, given the broad charge — to consider the general strategies of UiO — and the limited time available, this report is not a micro-level investigation focusing on the details of university business. Instead, we provide a series of snapshots of the university as it appeared to the committee, and offer tools for further diagnosis and analysis.

The SAB had 4 site visits to UiO: 4 - 5 December 2012; 27 - 28 June 2013; 28 - 29 November 2013; 3 - 6 June 2014.

Sources of Information

The SAB has based its analyses and recommendations on a wide range of documentation, including strategic documents, annual plans, internal policies, and information about current processes and results. The SAB also studied recent reports on research, higher education and innovation in Norway and the other Nordic countries, as well as in Europe and the rest of the world.

As part of the site visits the SAB met with, and in some cases also gathered written input from key stakeholders: the rector, deans, students, younger scholars and researchers, leaders of interfaculty research initiatives. We also had a separate meeting with the following external stakeholders:

- Kristin Danielsen, International Director, The Norwegian Research Council
- Arvid Hallén, Director General, The Norwegian Research Council
- Gunn Marit Helgesen, Chair of the Board, Norwegian Association of Local and Regional Authorities (KS)
- Toril Johansson, Director General, Ministry of Education and Research
- Kristin Skogen Lund, Director General of the Confederation of Norwegian Enterprise (NHO)
- Stian B. Røsland, Governing Mayor, the City of Oslo
- Sveinung Skule, Director, Nordic Institute for Studies in Innovation, Research and Education (NIFU)
- Tor-Arne Solbakken, Vice-President, The Norwegian Confederation of Trade Unions (LO)
- Ola Stave, General Secretary, The Norwegian Association of Institutions of Higher Education (UHR)
- Hans Erik Vatne, Director of Technology, Hydro
- Knut Olav Åmås, writer and *Aftenposten's* editor of culture and debate (as of autumn 2014: Director of the Freedom of Expression (*Fritt Ord*) Foundation)

Finally, on June 3rd 2014, the SAB had the privilege to meet with the Norwegian Minister of Education and Research, Mr. Torbjørn Røe Isaksen.

PART 1: INTRODUCTION



The University of Oslo's ambition is clear: 'The University of Oslo will strengthen its international position as a leading research-intensive university through a close interaction across research, education, communication and innovation' (*Strategy 2020*).

While not world-leading, UiO is a university of good international standing.[1] UiO's goal is to become more visible and more competitive internationally, to increase its contributions to international academic developments and participate more actively in the efforts to address the challenges facing the world today.

The ambitious and demanding *Strategy 2020* covers a broad range of targets and addresses the relevant challenges for a top university. However, while the targets are important, they cannot all be achieved. As it stands, *Strategy 2020* is rather general: it fails to give clear directions and set clear priorities. In addition, the present performance of UiO appears not to be fully in line with the targets and level of ambition.

The SAB has not been charged with proposing changes to the strategy. Our task has been to offer advice on how UiO can best improve the execution of its strategy and meet its goals. To fulfil our objective, we developed a tool — the identification of ten 'profile dimensions' — that we believe will assist UiO in setting clearer priorities for how to achieve its ambition to become a world-class university. Thus we offer our 'profile analysis' (further described in Part 3) not simply as a result, but as a method for understanding the overall profile of a university, and helping it to identify the directions it must take in order to achieve its strategic goals.

On each profile dimension, the SAB has formulated its own assessment of UiO's performance. Our assessment is not (nor could it be) the outcome of comprehensive research, but a relatively subjective judgment based on our various backgrounds and experiences; input from external and internal stakeholders; and the documentation made available to us. When UiO considers its future strategies, we strongly recommend that it undertakes its own thorough analysis of its challenges. We also hope that the tool we have used will assist the university in this process.

Given UiO's ambitions, the SAB has sought to assess the university in the context of the major global and national transformations influencing the performance of ambitious universities. What are the drivers of change affecting UiO on the global scale and in the national environment? How are we to understand the university's role in the 'innovation ecosystem'? We have also identified a number of

[1] UiO was ranked as number 69 on the Shanghai Academic Ranking of World Universities 2013, and as number 185 on the *The Times Higher Education* World University Rankings 2013-2014 (there is no other Norwegian university among the top 200 on either ranking). UiO recently participated in U-Multirank, a global multidimensional ranking tool, which showed that this university's performance is among the best in Norway.

challenges within the Norwegian 'innovation ecosystem' to be addressed on a national level. These issues are explored in Part 2.

In Part 3, we conduct our 'profile analysis' of UiO, assess UiO's present performance and identify what we consider the best directions for future development. In part 4 we list recommendations we think will help UiO in reaching its strategic targets. And finally, in part 5, we point to some national conditions which constrain UiO's ability to reach its goals.

PART 2: MAJOR CONTEXTUAL CHALLENGES – UiO'S GLOBAL AND NATIONAL ENVIRONMENT

In the contemporary world no institution exists in isolation, least of all a major university. UiO's strategy should be assessed in its global and national contexts.

The Global Environment

- The world faces many serious global and interrelated challenges, such as climate change, energy shortages, poverty, migration, and security. Universities are increasingly expected to participate actively in the search for solutions.
- When universities are expected to address a large number of new problems, and also adapt their original mission of academic teaching and research to the new context of innovation, there is a risk of 'mission overload'.
- The increased international competition for talent (both for students and academic staff), for research funding and reputation forces universities to develop their own specific profile and strengths, and to look for effective international partnerships.
- But international cooperation is also growing. Today, universities all over the world increasingly join international consortia and set up joint programmes in education and/or research, whether on a regional or global scale.

The National Environment

- The demographic development: Norway has an aging population.
- The economic context: the Norwegian economic situation is favourable; better than in almost all other European countries. However, the Nordic economic and social model must be made sustainable for the future. There is also a need to diversify Norway's economic and industrial base. The universities are expected to contribute to develop Norway as a viable and innovative 'knowledge society'.
- Political values: Although Norwegian universities formally enjoy a high level of autonomy, they are in fact constrained by a policy context committed to strong, traditional values such as equality and regional policy. Although the emphasis on equality for all is laudable, without adequate and effective policy initiatives ('excellence initiatives') it will create 'knowledge plateaus'.
- Public service ethos: In Norway, universities are first of all seen as public institutions in a welfare society. Among the consequences are the absence of tuition fees, and little or no selection of students.
- Cultural/social values: Competition is not considered attractive in Norway. It is difficult for universities to reward excellence without creating internal dissent. However, competition is essential for excellence in research and education.
- The higher education and research policy context: Norwegian higher education policy emphasizes mass access and a strong regional focus. Moreover, much research prioritization

takes place outside the universities (in the Research Council, through earmarked funds, and in independent research institutes).

- Research funding: Norwegian research funding is rigid. Programme-based research policy appears to be determined to a great extent by the Norwegian Research Council, rather than by the universities. There is little funding available for individually driven projects. As a result, Norwegian research culture exhibits a high level of ambiguity concerning the relationship between dependence and autonomy.
- Embedded disciplinary divides: The so-called 'sector principle' — the idea that different government ministries should sponsor research in their own areas of responsibility — is an obstacle to the creation of flexible interdisciplinary research environments crossing boundaries between institutions, and between public and private research interests. The 'sector principle' also limits the flexibility, responsiveness and mobility of Norwegian institutions of higher education. In addition, it creates a situation in which available resources are not always efficiently used, so that further concentration might be beneficial.
- Possibilities for private investments: Universities in Norway depend on public funding. Norway has no traditions for private investment in research and teaching/learning in the higher education system and lacks a culture for voluntary donations.

Conclusion

Given these contextual challenges, it will not be easy for UiO to realize its ambition to become a leading international university. Given that the international context today is highly challenging, these national conditions make it difficult for the university to design and implement a globally effective strategy.

In the following parts of this report the SAB offers a profile analysis and a set of recommendations with respect to developing such a strategy for UiO. But first we briefly describe a specific challenge for the UiO, based on the general notion of 'innovation'.

The Innovation Challenge: 'Ecosystem Thinking'

Universities in Norway, as in many other countries, are considered crucial to national and international innovation systems. They are expected to produce the knowledge and the future human capital that will lead to the sustainable creation of innovative societies.

The national need for global competitiveness requires a well-functioning innovation system. The SAB's analysis of UiO's capacity for innovation has been inspired by 'ecosystem thinking,' which considers innovation to be the result of a complex set of activities and linkages between various actors in a context specified by boundary conditions. The key elements in an 'innovation ecosystem' are:

- Knowledge creation (takes place in universities, colleges and other research organizations; and manifests itself through publications, patents and products. It provides the base from which new products, services and processes emerge).
- Knowledge application (takes place in existing and new companies and manifests itself through new products, services and processes).

- Effective linkages between the various actors in the processes of knowledge creation and knowledge application.
- Intermediaries (arenas in which the actors involved can meet and interact, and mechanisms that allow these actors to combine their efforts).
- Funding arrangements (stimulating the actors involved to exchange knowledge and to design, test and introduce new products, services and processes).
- Access to markets.
- Entrepreneurial spirit.
- Cultural and societal attitudes towards innovation.

Conclusion

Like many universities worldwide, UiO will have to find and formulate its views on and its position in the national Norwegian innovation ecosystem. To do so, it must have both a clear strategic vision and an effective analysis of its own roles in the ecosystem.

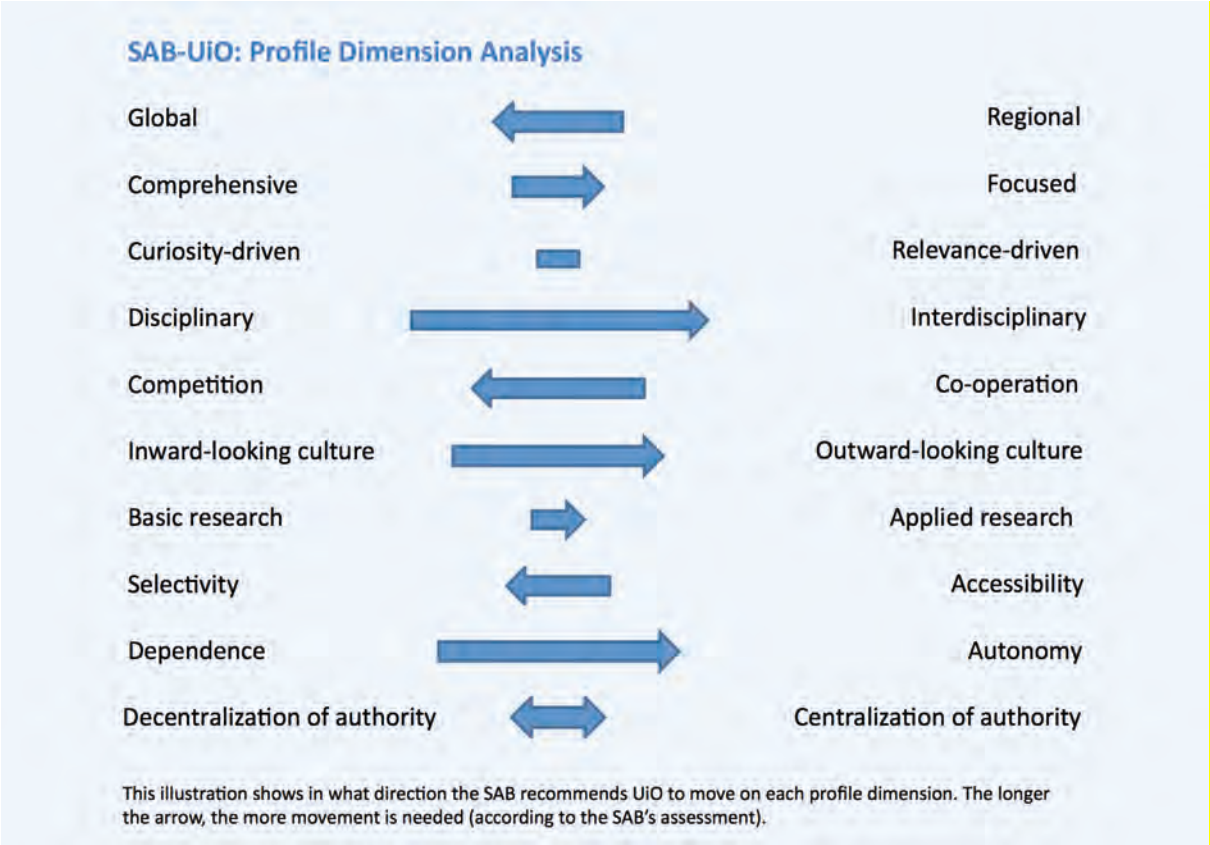
PART 3: PROFILE DIMENSION ANALYSIS OF UIO

Profile Dimensions

A university's profile is its general identity, behaviour, and performance, which consists of different, interrelated dimensions. Thus, a 'profile dimension' is one of several aspects on which a university's profile can be analysed and assessed. In relation to UiO, the SAB has identified and analysed ten distinct profile dimensions. We would like to stress that the specific dimensions analysed here are not unique to UiO; all major universities today face broadly similar challenges.

Below we represent each profile dimension as two seemingly opposite poles. However, the two extremes are by no means always contradictory; in fact, some are even complementary. On each dimension, each university must find the right balance, namely the one that best furthers the specific university's mission and strategic goals. Needless to say, the 'right balance' will be different for different universities.

In what follows, we describe each profile dimension, assess UiO's current position, and indicate how UiO could develop in order to better achieve its strategic goals. We have categorized the dimensions as follows: general academic focus; research and education focus; external conditions; and governance.



This illustration shows in what direction the SAB recommends UiO to move on each profile dimension. The longer the arrow, the more movement is needed (according to the SAB's assessment).

General Academic Focus

1. Global – Regional

Description: This dimension considers to what extent a university is willing and able to play a role on the world academic stage. A world-class university must be globally oriented, and it must be able both to perform and invest in teaching/learning and research on a par with rival international institutions. A regionally focused university is primarily an institution serving the needs of its regional environment and sees it as its task to address these needs with a combination of high levels of quality and relevance of its academic activities. However, it is possible to have both a global and a regional focus at the same time. For UiO, examples of such a combined strategy would be focusing on issues such as peace, the Nordic model, or the Arctic.

Assessment: UiO's ambition is to become more globally oriented and more visible on the global arena. The Peder Sather Center at Berkeley in the USA and *The Lancet — UiO Commission on Global Governance for Health* are steps in the right direction. UiO has a number of assets favouring the development of a more global profile (attractive working conditions, a high number of programmes taught in English, good student housing for foreign students). However, UiO still appears to be first and foremost a national institution focusing on Norwegian students and national concerns.

2. Comprehensive – Focused

Description: This dimension is one of the most challenging for many universities in the current globalised higher education and research systems. It concerns the extent to which a university can develop and afford a broad portfolio of academic programmes (in teaching/learning and research) while also showing a high level of quality performance across this portfolio. A more comprehensive university addresses a wider range of academic programmes and thus has to meet the challenge of how to offer high levels of quality in all of them. A more focused university is able to concentrate its academic efforts on a limited number of programmes, thereby also allowing a concentration of its budgets and facilities.

Assessment: UiO has not set sufficiently strong priorities with respect to this tension. It appears to strive to be both comprehensive and focused at the same time. In this respect, UiO is like other major Nordic universities, which traditionally aim to reach excellence through being comprehensive, i.e. by being its nation's 'flagship university.' However, in a world in which academic excellence is assessed in a context of global competition, this strategy no longer works. The SAB would like to see the emphasis fall more squarely on flagship programmes, rather than on flagship institutions.

Being an excellent comprehensive university is both difficult and expensive, and if UiO intends to remain such an institution it must be willing to pay what it costs. However, no university can reach global excellence in everything. Priorities are required. Assuming that UiO intends to remain a comprehensive university, it should aim to become a more flexible comprehensive university. It needs to select fields in which it wants to reach world-class levels (presumably these will be fields highly relevant in the context of the Norwegian innovation ecosystem), and fields in which it wishes to be a solid, but not a world-leading institution. In the latter fields, quality of education and research will be improved by greater national concentration of resources, and by extensive use of (national and international) collaboration with other institutions, not least on the Nordic level.

3. Curiosity-Driven – Relevance-Driven

Description: This dimension addresses a major challenge for any university: are its academic activities mainly driven by curiosity or by relevance? Curiosity is the driving force for scientific investigation. It is also a crucial ingredient for success in learning. Researchers and students should have opportunities to cultivate their curiosity, whether by engaging in ground-breaking research or by studying what they consider interesting. However, society also expects academia to be relevant and to deliver analyses of and solutions to urgent problems. In addition, it expects universities to provide students with knowledge and skills that are relevant for the future of society. Likewise, students want their university to prepare them to do something meaningful in life.

Assessment: UiO meets these expectations by offering its students and faculty members a wide range of research opportunities, subjects of study, and interactions with society and industry. In UiO's work on how to set priorities and select future strategies, it should explicitly reflect on how to maintain the balance between curiosity and relevance driven research and teaching.

4. Disciplinary – Interdisciplinary

Description: This dimension addresses the extent to which a university organises itself along disciplinary lines. There are excellent reasons for teaching students the 'basics' within the framework of the traditional disciplines. However, it has become increasingly evident that exciting new insights are generated by tackling a given problem from the point of view and with the methodologies of several disciplines.

The modern life sciences, for instance, are by definition interdisciplinary in their effort to understand the processes of living organisms on the basis of the laws of physics and chemistry. Likewise, anthropology and archaeology have been dramatically enriched by new information about the genome of humans and their hominid ancestors, just as research in the humanities takes advantage of advances in information technology. These developments require universities to develop greater flexibility for collaboration between different faculties ('schools'), and for removing barriers between disciplines without weakening them. Faced with such challenges, a university may have to restructure its research and teaching organisation, in particular its graduate programmes.

Assessment: At UiO we got the impression that many faculty members do not necessarily see why they should be involved in interdisciplinary work. At present, interdisciplinary activities mostly take the form of collaborations among participants from different disciplines, rather than the exploration of truly integrated interdisciplinary areas. UiO study programmes reflect the barriers between the different schools or faculties, and the rigidity of the programmes appears to restrict the freedom of internal student mobility. This also affects the drop-out rate. New initiatives are being developed too slowly, and still arise largely from within individual disciplines.

At UiO learning and education appears not to be considered as a communal space constituted by criss-crossing investigations. Thus, there is an absence of interdisciplinary ('joint') appointments, and students are forced to choose a specific study programme right from the start. 'Cross-listing' of courses (in which the same course gives credit in several different departments or study programmes) is underdeveloped.

In the SAB's view, UiO should become considerably more interdisciplinary. Barriers between traditional disciplines should be removed without weakening standards of disciplinary excellence. Given its comprehensive portfolio of disciplines and fields, UiO has the potential to achieve this goal. However, to release this potential UiO must design and implement new frameworks, including new structures of governance that will facilitate breakthroughs, creativity, and innovation, and also encourage organic growth of interdisciplinarity. This will enable UiO to become a central actor in the Norwegian innovation ecosystem.

5. Competition – Cooperation

Description: This dimension concerns the extent to which a university primarily focuses on academic competition (for talent, funding, reputation) or on academic cooperation (in order to create positive scale effects and investment opportunities). In general terms any university will prefer a balanced combination of both mechanisms. But at the same time in any balanced combination, a preference will become visible in relation to the norms and values a specific university wants to stress.

Assessment: Competition fosters excellence, now more than ever. Our impression is that UiO is not very competition-focused, and that it has been hesitating on whether it really wants to shoulder the inevitable consequences of a stronger emphasis on competition and excellence.

World-class universities must have high-performing individuals and teams with the capacity to make an international impact. Part of doing this is developing co-operation with high quality research around the world. The general lack of such individuals and teams in Norway is well documented in the recent report to the Research Council of Norway, entitled *Room for increased Ambitions? Governing breakthrough research in Norway 1990 -2013*.

Currently, UiO is not doing enough to challenge underperforming teams and individuals, or to reward excellence. A clear policy for how to foster excellence does not seem to be in place and excellence in education (teaching, quality of study programmes) has so far not been given sufficient attention. At present there are few incentives which encourage competition among academic staff and among students. Faculty members can, if they wish, avoid exposure to any form of competition. Furthermore, when hiring new faculty, UiO is not making enough efforts to recruit the best brains in the world. Given the strong tradition for equality in Norway and other Nordic countries, it will be a challenge to find ways to improve this situation.

6. Inward-Looking Culture – Outward-Looking Culture

Description: This dimension regards the extent to which a university is focused on its 'own business' (its own ways of carrying out teaching and learning, and research, and its own ways of organizing its support systems and processes) or on developments, challenges and opportunities coming from outside the university.

A more 'inward-looking' university focuses on a more or less 'traditional' academic culture and manages its activities primarily by building on its own traditions, processes and systems. A more 'outward looking' university is responsive to, or even actively focused on, outside incentives and conditions, and looks for partnerships and cooperation with other organisations, locally as well as

internationally. When necessary, it allows such interactions to change its own culture and procedures.

An 'inward-looking' university may well have many international collaborations and agreements, but it seeks principally to make them fit its own existing structures. An 'outward-looking' university is open and connected to what is going on locally, nationally and globally. It responds to such outside influences by actively considering whether they offer opportunities to change, or even transform, curricula, teaching, and research initiatives. It makes active choices whether to engage with or to keep its distance from the particular phenomenon, trend, or event.

Assessment: Much has changed in UiO's culture during the last 4-5 years, both in terms of initiatives and mind-set. However, we find that UiO is still largely inward-looking. While many individual faculty and researchers at UIO are highly outward-looking and engage consistently with institutions abroad, such collaborative initiatives do not necessarily get reflected institutionally. There is still a certain reluctance to open UiO's doors to new kinds of interactions with outside partners and institutions, whether in Norway or elsewhere.

The role of universities in an innovation ecosystem is not only to produce and transfer new knowledge to society but to interact with the rest of society (with business and industry, technology innovators, cultural institutions, health and social institutions), to develop new priority areas in research and in teaching/learning. To maintain its economic, social and cultural legitimacy, UiO should make greater efforts to reach out to other sectors of society. Moreover, UiO has the privilege of being located in the Norwegian capital, with its wealth of cultural, governmental and business resources, yet we find that it lacks the flexibility and interest required to integrate them in its own activities.

In particular, UiO has a great, but largely unrealized potential for interaction with other cultural institutions in its local environment, institutions which themselves have strong international collaborations and outreach (the Literature House, the National Theatre, the National Library are just the most prominent).

Research and Education Focus

7. Basic Research – Applied Research

Description: This dimension focuses exclusively on research. Basic research, which is often most successful if curiosity-driven, advances knowledge, and may eventually — sometimes after many years— lead to applications. Although applied research may occasionally give rise to new initiatives in basic research, it is usually concerned with questions of immediate relevance, and focuses on problem-solving, thus giving rise to innovation based on existing knowledge. Such innovation can be crucial to socio-economic development, but rarely leads to scientific breakthroughs.

Assessment: The current balance on this dimension is fine. UiO has chosen a clear position here. On the one hand UiO emphasizes basic research, and it certainly fulfils the task of exposing students to the most recent advances in specific fields. On the other hand, UiO also tries to address the problems of society, and some of the needs of business and industry in the national innovation

ecosystem However, when cooperating with industry, the university does not wish to limit itself to problem-solving, since it sees its role as primarily on the side of knowledge generation.

8. Selectivity – Accessibility

Description: This dimension addresses the educational focus of a university. A university that emphasises selectivity limits access to its programmes, and selects only students of the highest quality. A university which tries to reach out to as wide a clientele as possible stresses the importance of accessibility and maximises its enrolments.

Assessment: UiO stresses accessibility over selectivity. This is related to the national environment. Although UiO appears to be one of the most competitive educational institutions in Norway, in practice there is still a perception that all students should be allowed to study at UiO. In addition there is a common perception that the Norwegian funding system for higher education provides incentives towards admitting larger number of students. Even if this is correct, there is a need for UiO to show greater awareness of the consequences of its choices concerning the issues covered by this tension.

The present drop-out figures at UiO are disturbing, for high drop-out rates is a waste of resources. The SAB is aware of the on-going process at UiO to establish more accurate statistics for drop-out to make it possible to distinguish between a real drop-out and a change of programme. However, while there are many reasonable explanations for the drop-out numbers (including the absence of a clear distinction between full-time and part-time students, and students who undertake their courses in a life-long learning perspective), the problem demands closer attention.

High drop-out rates are in part a consequence of the current organization of study programmes. Because they have to apply for admission to a specific programme, students must decide on their specialization too early. The SAB understands that this is a side effect of the 2003 Quality Reform. But, as we mention under the discussion of interdisciplinarity above, high-quality education and research require universities to develop far more flexible and interdisciplinary study programmes, which would include making it easier for students to move between fields.

External Conditions

9. Dependence – Autonomy

Description: This dimension has great impact on a university's ability to develop its own strategy, programmes and activities. If the level of dependency is high, a university is forced to act within given boundaries (legal, financial, regulatory, policy-driven) and to respond to priorities set from the outside. If the level of autonomy is high, a university has substantial leeway to design and follow its own strategic orientation and to act according to its own values and norms.

Assessment: In terms of the laws and regulations imposed on institutions of higher education, Norwegian universities are probably among the most autonomous institutions in Europe. However, as we have pointed out in our discussion of UiO's national environment, this is not true in terms of funding. Norwegian universities are profoundly dependent on public funding, which is increasingly

earmarked for specific purposes. Private funding is rare. As a result, the university is severely constrained in the allocation and use of financial resources.

Since UiO depends on public funding, it must expect some government coordination of national targets and the role of the university, and some specific requirements from the government. However, the Norwegian system also creates a different type of dependence by regulations from governmental fields other than those concerned with research and education, e.g. from the Ministry of Health concerning education and research within the health sector. (See also our discussion of the so-called "sector principle" in part 2.)

More 'real autonomy' is crucial to allow UiO to become a stronger actor in the national innovation ecosystem. In this context, UiO has to confront a major weakness of the Norwegian innovation system: the absence of venture funds. To be effective as a partner in innovation processes the university should gain better access to venture funding.

Governance

10. Decentralization of Authority – Centralization of Authority

Description: The way authority is distributed in the governance structure of a university has a major influence on its ability to execute its strategy. The distribution of authority is reflected in a university's organisational structure (which can be more or less decentralised) and in its decision-making processes (which can be more or less collective).

The governance structure of a university to a large extent defines its capacity to design and execute its strategy. A decentralized university governance structure is characterized by complicated and slow decision-making and implementation processes, all the more so when coupled with abundant arenas for collective decision-making. On the other hand, the combination of a decentralized governance structure and collective decision-making often leads to high levels of legitimacy and commitment. Thus a more centralized university governance structure offers the opportunity of more efficient decision-making and implementation processes, but runs the risk of decreasing commitment and weakening legitimacy. To find the optimal balance is crucial to effective strategy development and implementation.

In general, each university must find its own 'right balance' on this dimension. However, the 'right balance' is not a matter of choosing one uniform governance structure to fit all the university's activities, but of choosing the right governance structure for each specific activity or programme. In addition, a university's governance structures must always serve the university's fundamental mission: education and research.

Nordic universities tend to believe that if they choose one 'right' governance structure and use it uniformly, then everything else will follow. But this is not necessarily true. Rather, the university leadership must provide different environments for different purposes. A modern university must trust individuals and groups to find the best and most creative solutions, and provide them with the opportunity to create excellent projects and programmes. The ideal therefore is for a university provide a variety of governance structures that can stimulate innovation and creativity.

For instance, when it comes to research management, particularly the initiation and implementation of new projects and programmes, the commitment of individual scholars and individual teams of researchers is crucial and may require a decentralized structure of authority. However, decentralization here does not mean absence of support from the university, but rather the provision of the architecture or platform necessary for the implementation of such researcher-driven initiatives. On the other hand, teaching and learning activities — pedagogical initiatives, the development of study programmes and so on —require their own, different structures of decision-making and implementation. Finally, interdisciplinary study programmes, which have to stimulate integration of disciplinary knowledge bases, often require a more strongly centralized governance structure.

Assessment: Currently, UiO has a uniform governance model. The university's authority distribution is wide. The governance structure is rather decentralized and decision-making is mostly collective. The organization is fragmented, and separate kingdoms or silos with their own cultures abound. This leads to a certain reluctance to select and design focus areas, and hampers the efforts to implement strategic choices. Thus, to mention one example, each faculty ('school') has its own processes and policies concerning recruitment where a central policy and process would be far more effective. UiO does not currently have the organisational flexibility to meet the need for interdisciplinarity and/or to connect to outside actors, which means that it cannot be a fully effective partner in the Norwegian innovation ecosystem.

The governance issue is not integrated in *Strategy 2020.* But without governance reform UiO will never be able to set clear priorities or succeed in implementing them. UiO cannot continue to use its present uniform approach. It must find the right mode of governance for each specific division, programme, initiative or activity.

PART 4: RECOMMENDATIONS

Introduction

UiO must above all set clear priorities for its focus and direction. We strongly recommend that UiO undertakes its own thorough analysis of its challenges and opportunities in the current national and global context. While we hope that the university will be interested in the results of our own 'profile analysis' of UiO, we urge UiO to perform its own analyses in order to get a clearer vision of its strategic goals (for example by applying profile analysis to specific programmes or projects, by reducing or increasing the number of dimensions, or by rethinking the assessment of a specific dimension, etc.).

Below, we present a list of recommendations intended to help UiO meet its strategic targets. Our conclusions and recommendations are based on the profile analysis, and on our dialogue with internal and external stakeholders. We have organized the recommendations into the same four groups we used for the profile analyses.

General Academic Focus

- UiO should develop a strong focus on local strengths, with the aim of becoming a major global presence in fields rooted in its specific location.
- UiO must work harder to reach out to global talent and make competition on an international scale a top priority in hiring.
- UiO should seek to improve its output from the EU's funding programmes (*Horizon 2020*) and further increase the international mobility of its students and academic staff.
- In general, UiO should create an atmosphere that allows individual originality and creativity to flourish. Individual initiative is essential to efforts to improve the quality of university research. UiO needs to safeguard researcher-driven initiatives by making it easy for individual researchers and scholars and small teams to begin to build up new initiatives which may not fit into any larger programmatic investments. This is crucial for genuine research creativity. Over time, such small 'bottom-up' initiatives may develop into centres of excellence.
- UiO should take a leadership role in developing focused centres of teaching/learning and research, not just on a national but on a Nordic level. Today, new technology makes this easier than before. This will enable the national university system to avoid duplication, and increase the quality of teaching, particularly in smaller fields. UiO should set clear excellence targets for such fields. We strongly recommend collaboration with Nordic universities in order to achieve critical mass and resources in the selected areas of priority.
- UiO needs to develop a broader and deeper understanding of interdisciplinarity, including its societal aspects. The university must simultaneously give strong support to interdisciplinary bottom-up activities (both in research and education) and implement top-down measures to facilitate interdisciplinary education and research.

- The three existing interdisciplinary milestone initiatives (devoted, respectively, to the life sciences, energy systems, and the Nordic model) should become strong university Institutes. By 'University Institutes' we mean entities for teaching and research that cross traditional boundaries between departments and divisions or schools ('fakulteter'). This will speed up the development of high-quality interdisciplinary activities by bringing in external talent, funding and other resources.

- Interdisciplinary initiatives based on collaborative efforts (as opposed to integrated interdisciplinary exploration) should not be organized in the same way as the three milestone initiatives.

- To further interdisciplinarity, UiO should facilitate appointments across departmental and faculty boundaries, as in the US system of 'joint appointments'.

- For successful institutionalisation of prioritised interdisciplinary areas, it is necessary to rethink existing governance structures. When creating new University Institutes, certain principles should be followed: They should be independent of existing faculties (i.e. led by the Rectorate), and get resources both from the current university funds and from new resources.

- When major new interdisciplinary initiatives are considered, UiO should commission an international competitiveness analysis to assess whether UiO has a realistic chance to become a world leader in the relevant areas. If these chances turn out to be limited (for instance because of the need of large investments), then the initiative should be dropped. A similar competitiveness analysis should also be undertaken when existing initiatives are evaluated.

- Even strong and high-ranked universities aren't uniformly excellent in every field. UiO must decide on its priorities and select its peaks. UiO should of course be competent in all the fields it addresses, but should strive to achieve world-class excellence only in its specializations.

- UiO should strive to develop a more competitive and performance-oriented culture.

- UiO should pay more attention to excellence in education (teaching, quality of study programmes).

- While UiO is already deeply engaged in national and international collaboration, integration and interaction with outside resources has not reached the level we think is necessary. UiO should develop structures to facilitate interaction with local and global partners and stakeholders, in ways that do not simply seek to slot them into its own existing practices and traditions, but also potentially allow the university's structures and practices to be changed by them.

Education and Research

- Currently the bulk of student education takes place in relatively isolated disciplinary silos. The rigid structure of study programmes limits interdisciplinarity and restricts mobility. We encourage more flexibility, more interdisciplinarity and broader programmes. While we are aware of national restrictions, we nevertheless recommend that the university consider developing a more general introductory first year study programme, maybe modelled on the idea of a 'liberal arts' style freshman year. Students can then choose their specialization a bit later when they know more about what it is to be a student and what they are interested in.

- Excellence in education (teaching, quality of study programmes) has so far not been given sufficient attention. UiO should consider developing specific excellence programmes for ambitious students ('honours programmes', or even an 'honours college' option for the most ambitious).

- While we understand that the Norwegian cultural climate is hostile to tuition fees, we want to remind UiO that tuition fees can give students a greater stake in their education. A good system of tuition fees, offset by grants, will not disadvantage underprivileged students. It will also make international collaborations and exchanges easier for UiO.

- UiO must develop tools to handle underperformance among students. Underperformance wastes resources and lowers the quality of UiO's degrees. UiO should consider introducing clearly defined performance levels, e.g. saying that a student needs a specific mark to continue on a given programme.

- In order to prevent drop-outs UiO should do more to encourage a sense of class or cohort identity among its students, and provide greater social support and encouragement, particularly in the first year. It should consider conducting end of first year ('exit') interviews with students to learn what works and what doesn't. UiO should also consider developing a policy for part-time students or students who want to study in a life-long-learning perspective.

- UiO must develop a more outward-looking culture. External contributions from academics and practitioners (speakers, visits, short-term residencies, etc.) should be integrated into projects and study programmes, not just be considered as special events, disconnected from teaching and research. Regular interaction with such visitors will likely inspire UiO students to aim higher. In some cases, the visitors may assist in identifying valuable postdoctoral opportunities abroad. Such visits can be facilitated through greater collaboration with other institutions and organizations, not least in the Oslo area, but also elsewhere in Norway, and in the Nordic countries.

- Teaching and research staff in the strategic focus areas must be well connected internationally and senior scholars and researchers in all areas should be role models for international connectedness and mobility.

- Students should be encouraged to spend time abroad at an early stage in order to develop an international mind-set and become 'global citizens'. Hence, international mobility must be integrated into the individual programmes of study. Particularly while studying for the

BA, students should be encouraged to spend time abroad. UiO's default position should be to recognize credits earned abroad. Administrative procedures related to mobility should be as simple and non-bureaucratic as possible.

- UiO should consider establishing more ambitious forms of international education in fields congenial to UiO's culture and expertise, including, but not limited to, joint programmes and degrees. In this respect, strategic partnerships, not least with Nordic partners, should be important to UiO.

- To maintain its social and cultural legitimacy, UiO needs to expand and develop its integration in Norwegian society. A more outward-looking culture is on its way, but the SAB would still like to see UiO become an even more proactive and risk-taking institution in its efforts to reach out to other sectors of society. UiO's partnerships with society need to be developed further and there is a need to relate to external stakeholders more intensely and to bring in new people, also from outside academia.

- UiO should consider ways to make it easy for UiO students and faculty members to benefit from interaction with many of the prominent practitioners in every field (government, culture, business) who regularly visit Oslo.

- The recruitment policy has to become more outward-looking and more focused on attracting global talent. UiO should change its recruitment policy on the institutional level and use Norway's and UiO's excellent working conditions as a competitive advantage when it comes to attracting the best scholars and researchers in the world.

- The international mobility among academic staff UiO is too low. A globally oriented recruitment policy will improve this. In order to bring in external talent, a wider and more strategic use of the Professor II position is one way forward. UiO should also open its doors to practitioners (public and private), for example by considering a system of 'Professors of the Practice.'

- There is a need for clearer career paths beyond the post-doctoral fellowship and UiO needs to develop a system of career paths which is more streamlined with the international academic community. UiO should consider developing tenure-track assistant professorships, as in the U.S.

- UiO should take a far more active role in initiating international research collaborations, particularly in relation to its major strategic focus areas, since such collaborations are important for getting access to talented scholars and researchers.

- Individual performance criteria and incentives for teaching, research and learning should be developed for students as well as for faculty members. UiO would benefit from having greater transparency of performance at all levels of the organization. The present tools available to the university leadership to award good performance and to limit or improve underperformance are insufficient.

- Young researchers and scholars need more mentoring on broader career perspectives than they are currently getting. There is insufficient support to develop skills in grant application, which are crucial for their future careers.

External Conditions

- UiO must make it easier to move resources from an existing area, project or programme to new ones, in order to be able to implement its focus and prioritisation strategies, and in order to be responsive to changes in external environment
- UiO should increase its efforts to attract international (particularly EU) funding, increase private sector funding, and work to get earmarks removed from national funding. Diversification of the funding base will make UiO more autonomous.
- UiO should develop mechanisms for venture funding.
- UiO should also build up its private fundraising efforts.

Governance

- UiO cannot implement is ambitious aims without reassessing its governance structures. It should develop a flexible set of different forms of governance adapted to different parts of its central mission: research and education.
- UiO must be a national innovation player. It must develop the right conditions, including the right forms of governance, for innovation initiatives.

PART 5: NATIONAL CONDITIONS: INTERACTIONS WITH SOCIETY AND GOVERNMENT

The mission of building a better world and better society has historically been a critical dimension of an ambitious academic institution. UiO has clearly stated its global and national mission. There is, however, a strong interdependence between universities and the society they operate in.

Many of the university´s targets cannot be achieved without broad support from the Norwegian government and society. That is why we would like to encourage UiO to take a more active role in promoting reforms in the knowledge creation and innovation systems in Norway.

From UiO´s perspective the most critical reforms on the national agenda are:

- Design of a long-term plan for research and a comprehensive strategy for quality
- The reform of the funding system
- Improvements in the regulatory environment
- Diversification of profiles and the division of labour between Norwegian universities
- Streamlining the Norwegian Research Council.

UiO should be active in collaboration and discussions with the government to make the necessary reforms happen. Concerning the innovation ecosystem, UiO must also take an active role in initiating and developing needed partnerships and collaborations.

The purpose of this final section is to remind UiO of the importance of its national environment, and of the crucial need for the university to take a leading role in the effort to produce necessary reforms, by initiating interaction with stakeholders and government. To be effective in such interactions, the university must have a strong and clear strategic vision. Here, as throughout this report, therefore, our fundamental message to UiO is that it must make hard strategic choices based on stringent analyses of its challenges.

The first words of UiO's Strategy 2020 are 'Et nos petimus astra' — 'We too seek the stars'. To reach them will not be easy. But UiO is a university in a rich country. If it grounds its global aspirations on a clear understanding of its local strengths, we think the University of Oslo can build some very solid rungs on its ladder to the stars.

APPENDIX: CHARGE TO THE STRATEGIC ADVISORY BOARD

UiO : University of Oslo

Esko Aho
Shaheen Sardar Ali
Toril Moi
Gayatri Chakravorty Spivak
Erwin Neher
Peter Agre
Frans van Vught

Date:06.11.2012
Your ref.:
Our ref.:

Strategic Advisory Board of the University of Oslo – mandate and inaugural meeting

Dear Board members,

The University of Oslo's ten-year strategy - Strategy 2020 - provides the vision and level of ambition for the University towards 2020, and is the most important steering document for the institution. We therefore see it as the central point of reference for SAB's work and as constituting a basis for the Board's deliberations. The University is anxious to strengthen our capacity to realise our long-term ambitions and we would particularly welcome perspectives on these three areas:

- The current state:
  - Based on the information we provide at the upcoming meeting, we ask your view as to where we stand today. We would welcome feedback on our strengths, on areas where we underperform, and especially on areas that can be developed.
- Status UiO 2020 (the vision):
  - We solicit your opinion on the level of ambition embedded in our strategy plan Strategy 2020. What is a realistic ambition for our university, given the current funding level? What is a realistic ambition, in the case of a substantial increase in public and third party funding?
- The path from 2012 to 2020 (the strategies):
  - We ask you to review the strategies in Strategy 2020 as well as our ongoing processes, to judge whether we take the right steps forward.

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We believe the main challenges for SAB will be:
(1) to determine where we are, using an international frame of reference: UiO's characteristics, competencies, performance levels at present ("what is").
(2) to extrapolate from the ambitions and visions in Strategy 2020: what is a realistic and achievable profile in 2020 ("what should be").
(3) to highlight the gaps that exist and need to be addressed, and to table a set of recommendations for further action.

We expect that recommendations from SAB may fall into different categories, for example:

- Which of the 28 strategies in Strategy 2020 should be prioritised and given special attention from now on?
- Is UiO failing to manage possible conflicts between different objectives? Could this be handled better?
- Which of our strategies and ongoing processes should be bolstered by special initiatives, or more resources, from UiO or from the authorities?
- Are our current performance indicators fit for purpose, and are they showing progress towards our goals?

We would also like to be challenged on a range of more specific issues currently under discussion, such as:

1. How can we optimally exploit our academic breadth (interfaculty teaching and co-operation)?
2. How can we best develop possible synergies between UiO's strategy and the visibility of Oslo/Norway internationally? Specifically, how could UiO latch onto Norway's active foreign policy and high profile in peace and conflict issues?
3. Mission driven vs. curiosity driven research: Is there a conflict between the two? How can we find the balance? How much emphasis to put on "scientific activism" and "science diplomacy"?
4. How to handle university rankings (should they be considered a goal in themselves?)
5. How to ascertain that research and teaching are duly anchored in academic and democratic values?
6. How to ascertain diversity on campus? How to strengthen gender equality?
7. How to strengthen recruitment?
8. How to secure access to international networks? International/regional hubs vs. separate agreements?
9. How to secure the position of the humanities in a time when "for profit" is becoming a stronger element?

We expect the SAB will identify challenges and areas where change is needed; it may also identify areas where UiO is being limited by national frameworks and policies.

SAB will report to Rector Ole Petter Ottersen. Any follow-up actions on recommendations from the SAB will be discussed and decided upon by the University Board.

We are most grateful for your willingness to take part in this endeavour and look forward to welcoming you to our campus.

Sincerely yours,

Ole Petter Ottersen
Rector

Gunn-Elin Aa Bjørneboe
University Director

This document is authenticated electronically by the signer and stored for verification in 'ePhorte', the University document system.

Officer in charge: Senior Advisor Olaug Kristine Bringager

Knowledge will forever govern ignorance: And a people who mean to be their own Governors, must arm themselves with the power which knowledge gives.

James Madison



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