

Evaluation of the Social Sciences in Norway

Report from Panel 6 – Economic-Administrative Research Area

Evaluation
Division for Science and the Research System



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Evaluation
Division for Science

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Foreword

In 2017, the Research Council of Norway (RCN) appointed six panels to undertake a wide-ranging field evaluation of Social Sciences research in Norway. The panels comprised independent social scientists from a range of European countries. Each panel covered a specific research area within the social sciences. The panels worked from April 2017 until April 2018.

The Research Council commissioned the Nordic Institute for Studies in Innovation, Research and Higher Education (NIFU), Oslo, Norway, to provide scientific and project management support for all six panels. The NIFU team consisted of Mari Elken, Inge Ramberg, Vera Schwach and Silje Maria Tellmann, with Schwach as the head of the team.

Panel number 6 was responsible for assessing the Economic-Administrative research area. It included 7 members: Panel chair professor Niels Vestergaard, University of Southern Denmark; professor Thomas Rønne, Copenhagen Business School; professor Virpi Kristina Tuunainen, Aalto University School of Business; professor Tooraj Jamasb, Durham University Business School; professor Sally Dibb, Coventry University; professor Marie-Therese Claes, Louvain School of Management and professor Friederike Wall, Alpen Adria Universität.

The panel was assisted by panel secretaries Kristian Frisk (1.4.-31.8.2017) and Viktor Jozsef Racz (1.9.2017-31.3.2018), both University of Southern Denmark, Faculty of Business and Social Sciences.

Executive summary

There are 995 listed researchers listed for the Economic-Administrative research area, which is almost 1/3 of the total number of researchers in SAMEVAL. In total, 50 units have been evaluated of which there are 17 faculties, three research institutes and 30 research groups. The institutions range from mature universities to university colleges and research institutes that focus on an area of applied research, and hence there are very different baseline conditions – from universities financed by basic government funding, supplemented by project funding from the RCN, up to nearly 100% external research funding.

The research landscape of the Economic-Administrative research area is dominated by a few large universities and several small institutions with a clear mission and agenda to creating outstanding performances in terms of research quality and quantity. There are numerous research groups that have managed to raise their research quality to international standard. A clear strength of the area, as shown by the impact cases, is the many connections and various forms of cooperation with the private and public sector. Although some of the institutions have lower research productivity and quality in relation to international norms, some institutions and research groups conduct research of excellent quality. Institutions need to seek an appropriate balance between publishing productivity and publishing in the very best international journals. Although achieving the highest level of publication can be costly timewise, the benefits to visibility and branding of the institution can be considerable.

Many institutions need to find their niches in the Norwegian and international research arena and to develop strategies and management/leadership structures that reflect this positioning. The institutions need to develop strategies that better reflect their current situation and available resources: what difference do they want to make and what value will they add to Norwegian society?

The research groups, and consequently the research areas, have often developed in a bottom-up way, resulting in a poor match between institutions' goals and the developed research areas. Many research groups are driven by the motivation and interests of single researchers. The use of research groups as the main vehicle for organising research has to be developed further in many instances.

The main external source of funding, and in several cases also the only source, is the RCN. The overall rate of external funding is, in several cases, relatively low. The recent ready availability of domestic research funding means that many institutions do not appear to have fully developed the necessary administrative resources and capabilities to bid for international grants. To ensure the long-term sustainability of research, resources should be devoted to diversifying income streams and putting the necessary support in place.

Most institutions recruit internationally, but they may do so in a passive way. Its northern location can make recruitment more difficult in Norway than in central Europe. The location, particularly for institutions in Northern Norway, means a more creative approach to recruitment is necessary than for competitors in the rest of Europe.

The PhD programmes are small, except in a few cases, with only a few students enrolled within somewhat narrow fields of application. Close collaboration and nationwide PhD programmes could help create a more vibrant and active research environment for PhD students across institutions. As part of such a nationwide system, it would be important to decide how many PhD students to educate per year and to consider an appropriate distribution between the participating institutions.

Several institutions need a strategy for developing external networks in collaboration with research groups and universities within and beyond the Nordic region. This strategy could guide international collaboration in relation to funding and identify appropriate institutions for research exchanges. The regional and local profile of much of the research lends itself well to networking with local public organisations and private sector bodies. There are several excellent examples of strong relationships with non-academic stakeholders leading to productive and socially-relevant research projects with high social impact.

It is necessary for Norwegian research policy to focus on both basic and applied research. The bigger institutions and universities receive most government funding, and hence they are in a much better position to fund basic research. Other institutions have to focus more on applied research, because this provides a readier source of funding, very often from external sources. Hence, the current model leads to a mix of basic and applied research at the national level. However, this mix does not support applied and basic research within each institution. If the latter mix of applied and basic research is required, then the current financial structure does not support this objective.

Sammendrag

Det er meldt inn 995 forskere til det økonomisk-administrative forskningsområdet, altså nærmere en tredel av alle forskerne i SAMEVAL. Totalt 50 enheter har blitt evaluert, hvorav 17 fakulteter, 3 forskningsinstitutter og 30 forskningsgrupper. Institusjonene er alt fra veletablerte universiteter til høyskoler og forskningsinstitutter med anvendt forskning som hovedfokus, som med nærmere 100 prosent ekstern finansiering har et helt annet utgangspunkt enn universiteter med grunnfinansiering fra staten, supplert med prosjektfinansiering fra Norges forskningsråd.

Forskningslandskapet for det økonomisk-administrative forskningsområdet domineres av noen få store universiteter og flere små institusjoner med tydelige mål om fremragende forskning med hensyn til både kvalitet og kvantitet. Mange forskningsgrupper har klart å heve forskningskvaliteten til internasjonalt nivå. Et av feltets styrker, slik det fremgår av de innsendte såkalte "impact cases", er de mange forbindelsene og ulike samarbeidsformene med både privat og offentlig sektor. Noen av institusjonene har lavere forskningsproduktivitet og -kvalitet i forhold til internasjonale normer, men det er også institusjoner og forskningsgrupper hvor forskningskvaliteten er fremragende. Institusjonene må søke en passende balanse mellom publiseringsproduktivitet og publisering i de mest prestisjetunge internasjonale tidsskriftene. Selv om det kan koste mye tid å oppnå det høyeste publiseringsnivået, kan det gi betydelige fordeler for institusjonen med tanke på synlighet og merkevarebygging.

Mange institusjoner må finne sine nisjer på norske og internasjonale forskningsarenaer og utvikle strategier og ledelsesstrukturer som gjenspeiler denne posisjonen. Institusjonene må utvikle strategier som bedre gjenspeiler situasjonen som gjelder for dem, og de ressursene de har tilgjengelig: Hvilken forskjell ønsker de å utgjøre, og hvilken merverdi tilfører de det norske samfunnet?

Forskningsgruppene, og dermed også forskningsområdene, har ofte utviklet seg nedenfra og opp, noe som gir dårlig samsvar mellom institusjonens mål og de forskningsområdene de har utviklet. Mange forskningsgrupper drives framover av enkeltforskeres motivasjon og interesser. Bruken av forskningsgrupper som hovedmetode for organisering av forskning må i mange tilfeller videreutvikles.

Den viktigste eksterne finansieringskilden – og i mange tilfeller også den eneste – er Norges Forskningsråd. Den generelle graden av ekstern finansiering er i mange tilfeller relativt lav. Tilgjengeligheten av forskningsmidler i hjemlandet betyr at mange institusjoner tilsynelatende ikke har utviklet nødvendige administrative ressurser og kapasiteter til å søke midler internasjonalt. For å sikre at forskningen er bærekraftig på lang sikt, bør ressursene brukes til å diversifisere inntektsstrømmene og få på plass nødvendig støtte.

De fleste institusjoner rekrutterer internasjonalt, men de gjør det kanskje på en passiv måte. På grunn av beliggenheten mot nord kan rekruttering være vanskeligere i Norge enn i Sentral-Europa. Beliggenheten, spesielt når det gjelder institusjoner i Nord-Norge, medfører en mer kreativ tilnærming til rekruttering enn for konkurrenter andre steder i Europa.

PhD-programmene er små, unntatt i noen få tilfeller, og det er bare tatt opp noen få studenter innenfor heller smale felt. Tett samarbeid og nasjonale PhD-programmer kan bidra til å skape et livligere og mer aktivt forskningsmiljø for PhD -studenter på tvers av institusjoner. Som et ledd i et slikt nasjonalt system vil det være viktig å fastslå hvor mange PhD -studenter som skal utdannes hvert år, og komme frem til en passende fordeling mellom institusjonene som deltar.

Mange institusjoner trenger en strategi for å utvikle eksterne nettverk i samarbeid med forskningsgrupper og universiteter både i og utenfor Norden. Denne strategien kan styre internasjonalt samarbeid når det gjelder finansiering og for å identifisere passende institusjoner for forskningsutveksling. Den regionale og lokale profilen til mye av forskningen gjør den godt egnet til nettverksbygging med lokale organisasjoner i offentlig og privat sektor. Det finnes mange svært gode eksempler på tette bånd med ikke-akademiske interessenter som fører til produktive og sosialt relevante forskningsprosjekter med stor samfunnsmessig påvirkningskraft.

Det er viktig at norsk forskningspolitikk fokuserer på både grunnforskning og anvendt forskning. De større institusjonene og universitetene mottar mest statsstøtte, og dermed er de i mye større grad i stand til å finansiere grunnforskning. Andre institusjoner må fokusere mer på anvendt forskning ettersom dette gir enklere tilgang til finansiering, svært ofte fra eksterne kilder. Følgelig gir dagens modell en blanding av grunnforskning og anvendt forskning på nasjonalt plan. Denne blandingen støtter imidlertid ikke både anvendt og grunnleggende forskning i den enkelte institusjon. Hvis det oppstår behov for en blanding av anvendt og grunnleggende forskning, støtter ikke dagens finansieringsstruktur dette.

1 Scope and scale of the evaluation

According to its mandate one of the central tasks assigned to the Research Council of Norway is to conduct field evaluations of Norwegian research, that is, reviews of how entire fields, disciplines/research areas and academic institutions are performing in the national and international context. They provide an outsider's view of the research area under evaluation, and provide feedback on its strengths and weaknesses. The conclusions form the basis for recommendations on the future development of the research under evaluation, and provide input on national research policy and funding schemes in Norway. Moreover, they are expected to provide insight, advice and recommendations that the institutions can use to enhance their own research standards.

The evaluation of Social Sciences (SAMEVAL) aims to:

- Review the present state of social science research in Norway.
- Form the basis for recommendations on the future development of research within the various fields of the social sciences in Norway.
- Provide insight, advice and recommendations for the institutions evaluated that can be used to enhance their own research standards.
- Expand the knowledge base used to develop funding instruments in the Research Council
- Provide input on research policy to the Norwegian Government.

This evaluation of the social sciences comprises six research areas: geography, economics, political science, sociology, social anthropology and economic-administrative research. The practice of field evaluation is long established in Norway. The Research Council has previously undertaken national, subject-specific evaluations of all nearly all research areas involved in the current evaluation, with one exception: economic-administrative research. This is the first time this area has been singled out as a separate subject for evaluation.

As a point of departure, to identify, select and classify the relevant research social science areas and the researchers involved in each of the areas, the Research Council of Norway categorised the areas of social sciences using the definitions used in the Norwegian Centre for Research Data's (NSD's) register of scientific publication channels. All institutions with social science research as part of their activities were invited to take part. The Research Council sent each institution an overview of the researchers' publication data (2013–2016) from CRISTin (Current Research Information System In Norway). The institutions made the final decision to include researchers in the evaluation, and to which research area panel. The Research Council decided that research groups in all research areas had to consist of at least five members. The researchers had to be employed by the institution as of 1 October 2016, and they could not be listed if they were included in other ongoing evaluations.

This evaluation is more extensive than previous subject-specific evaluations, both with regard to the number of research fields and researchers to be evaluated, and with regard to the breadth of source material to be taken into account. The evaluation includes a total of 3,005 social scientists. It involves 42 institutions in the social sciences, 27 of which are faculties /departments at the universities and university colleges, and 15 are units at publicly financed social science research institutes (see Appendix B). The review also comprises 136 research groups.

The current undertaking is more than a mere update of earlier reviews in the field of social sciences. It spearheads a new practice of field evaluation, taking the recent evaluation of the Humanities as its model. In doing so, it includes three new and innovative features. Firstly, in addition to assessing research areas at the national and institutional level, the evaluation includes reviews of formalised research groups. Societal relevance is a second new dimension, while the third new dimension is the interplay between research, teaching and education.

1.1 Terms of reference

According to the terms of reference listed by the Research Council (appendix A), the overall aims of the evaluation of the research panels are to:

- review the scientific quality of Norwegian research in the social sciences in an international context;
- provide a critical review of the strength and weaknesses of the fields of research nationally, at the institutional level and for a number of designated research groups;
- identify the research groups that have achieved a high international level in their research
- assess the role of organisational strategies and leadership in promoting the quality of research, education and knowledge exchange;
- assess the extent to which previous evaluations have been used by the institutions in their strategic planning;
- investigate the extent of interdisciplinary research at the institutions and in the research groups;
- investigate the relevance and social impact of social sciences research in Norway in general and in particular its potential to address targeted societal challenges as defined in the Norwegian Government's Long-term plan for research and higher education;¹
- review the role of the Research Council of Norway in funding research activities in the social sciences.

1.2 A comprehensive evaluation

The Research Council has undertaken national, subject-specific evaluations of nearly all research areas in the social sciences since the turn of the millennium. The evaluations have usually confined themselves to one or a limited number of institutions, disciplines or fields. An evaluation of *social anthropology* was carried out in 2011, covering a total of 9 units and 88 researchers. *Geographical research* was also evaluated in the same year, in 2011, based on an assessment of seven research environments including 57 researchers. *Sociological research* was evaluated in 2010, comprising 13 research units and 177 researchers. In 2007, the evaluation of *economic research* comprised 20 units selected by the Research Council, and encompassed a total of 345 persons. Finally, a review of *political science research* was conducted in 2002, comprising 19 units and 164 researchers.

Since 2010, the Research Council has launched evaluations that cover larger research fields. An earlier example of what can be seen as a new tendency was the comprehensive evaluation of the scientific fields of biology, medicine and healthcare in 2011.² This was followed by a broad review of the

¹ Kunnskapsdepartementet (2014).

² RCN (2011).

fundamental engineering sciences,³ and, a few years later, the social science research institutes.⁴ In the context of the social sciences, the novel design for the evaluation of the Humanities is an important model for a new practice. A broad evaluation of the field of the Humanities in Norway started in 2016, and was finalised in June 2017.⁵ As mentioned, the set-up for the present assessment of social sciences follows the design from the Humanities evaluation, where an assessment of the humanities' societal relevance and impact of research, and the interplay between research and education were new features.

1.2.1 Societal impact of the social sciences

The terms of reference for this evaluation expressly combine established practice with new practice. The requirement to assess the societal relevance and impact of research in their area is a novel assessment practice. It calls for explorative searches for the various forms and channels through which knowledge from social science research may be seen to impact on activities in various spheres and areas of society. In a broader perspective, this is a response to concern about the need to enhance the impact research has on society.

In addition to a general search for demonstrated societal impact of scientific activity, the terms of reference for the evaluation of social sciences were to be viewed in the context of the five thematic priority areas and one scientific ambition set out in the Norwegian Government's Long-term plan for research and higher education from 2014.⁶

The six priorities are:

- seas and oceans;
- climate, environment and clean energy;
- public sector renewal, better and more effective welfare, health and care services;
- enabling technologies;
- innovative and adaptable industry;
- world-leading academic groups.

The definition of, and model for, societal impact in the Research Council's evaluations is derived from the 2014 Research Excellence Framework (REF) in the United Kingdom. In the REF, societal impact is defined as: 'any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia' (Research Excellence Framework (REF), United Kingdom, 2014).

1.2.2 The interplay between research and education

This evaluation includes another new feature in that it also investigates the links between research and education. This follows up an objective stressed in the above-mentioned Norwegian Long-term plan for research and higher education. The Long-term plan states that interaction between research, teaching and education should be taken more strongly into account in the policy for research and higher education. In line with this political objective, this evaluation of social sciences has focused actively on the connection between research and education. The political backdrop to this initiative was that the Norwegian Ministry for Education and Research had in 2014 encouraged the Norwegian

³ RCN (2015).

⁴ RCN (2017d).

⁵ RCN (2017).

⁶ Kunnskapsdepartementet (2014).

Agency for Quality Assurance in Education, (hereafter NOKUT)⁷ to explore possibilities for joint assessments of education and research.⁸

This political initiative has been followed up in two ways in the social sciences evaluation. Firstly, all the six research area panels were asked to take into account the interplay between research and education, including the impact of research on teaching. Secondly, three of the six research areas, namely sociology, political science and economics, were subjected to a 'pilot' evaluation, with a view to testing useful strategies and methods for an integrated education-research evaluation.

1.3 The overall evaluation process of the social sciences

The complete evaluation of the social sciences consisted of four elements: 1) three education panels, 2) six research panels, 3) an interplay panel for the combined evaluation of research and education, and finally, 4) a principal evaluation committee for the evaluation of all six social science research areas.

The work was divided into three phases, which partly overlapped.

In the first phase, the Research Council and NOKUT assumed responsibility for the research and education evaluations, respectively. Six research panels and three education panels worked independently. Each panel wrote an assessment report.

The six research areas were:

Panel 1: Geography

Panel 2: Economics

Panel 3: Political Science

Panel 4: Sociology

Panel 5: Social Anthropology

Panel 6: Economic-Administrative Research Area

In the second phase, NOKUT, in cooperation with the Research Council, took responsibility for a mixed education and research evaluation within three of the six research areas: sociology, political science and economics. The evaluation took the form of three different interplay panels: education and research in sociology, in political science and economics, respectively. Each panel consisted of two members.

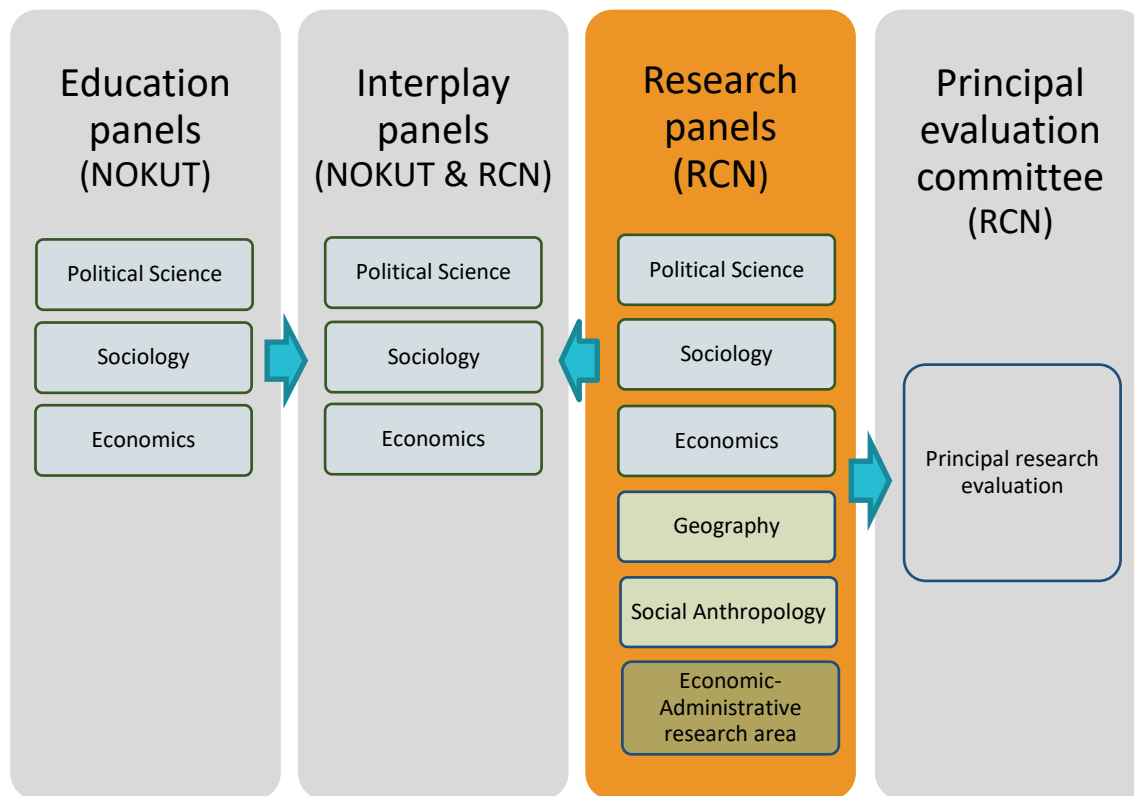
In the third phase, the Research Council asked the chairs of the six research panels to form a general evaluation panel, this being the principal committee tasked with reviewing the six social science research areas as a whole. The panel wrote an assessment report.

Figure 1 visualises the overall structure of the evaluation of research and education in the social sciences.

⁷ NOKUT (Nasjonalt organ for kvalitet i utdanningen) is an independent expert body under the Royal Norwegian Ministry of Education and Research.

⁸ Kunnskapsdepartementet (2014b).

Figure 1 Evaluation of social sciences in Norway, sections and work process



1.3.1 The six research areas: panels and process

Panels of international experts, mainly from the Nordic countries and Northern Europe, carried out the evaluations. Each research panel had from six to nine members; all the panels had the same terms of reference, and they used identical approaches and templates in their assessments. A common denominator for all the reviewers was the aim of evaluating research with respect to its scientific quality and relevance in the broad sense. The panels were put together to cover different sub-fields within each research area.

Panel

The members of the Economic-Administrative research area panel were:

- Panel chair: professor Niels Vestergaard, University of Southern Denmark
- Professor Thomas Rønne, Copenhagen Business School
- Professor Virpi Kristina Tuunainen, Aalto University School of Business
- Professor Tooraj Jamasb, Durham University Business School
- Professor Sally Dibb, Coventry University
- Professor Marie-Therese Claes, Louvain School of Management
- Professor Friederike Wall, Alpen Adria Universität

1.3.2 The organisational units and entities

The evaluation of the six research areas embraced four levels as listed below and shown in Figure 2.

Please note that the primary objects of this evaluation are the researchers and their research groups. They constituted the research area within each institution, and are the primary object of assessment, not the institutions as such.

National research area

An overall national review of the state-of-the-art in the research area was a goal for the evaluation. Hence, the evaluation at the national level includes comparing the quality of Norwegian research with international scientific quality. In order to conclude on the national level, the panel drew on their evaluations of institutions, research areas within the institutions and research groups.

Institution

Institution refers to either an independent research institution/research institute or to the faculty level of a higher education institution (cf. Institutional self-assessment, p. 1, Appendix C). The aims of the reviews at the institutional level were to assess how the research area was constituted and organised at the institution, also including the institutional strategies pursued with a view to developing research performance and scientific quality.

Research area within the institution

A research area is defined as a research discipline corresponding to the area covered by a panel (cf. Institutional self-assessment, p. 4, Appendix C). The examination of research performance and scientific quality was intended to review the state-of-the-art and encourage further development of research and scientific quality. In addition, the evaluation of ongoing individual and collective work was intended to provide a national overview of the research field. This level will in several cases cut across organisational units, but the rationale is to highlight each discipline corresponding to the relevant panel (Ibid. p.1).

Research groups

The intention of including research groups was to enable peer reviews of research topics and scientific quality, and to evaluate the interaction between researchers who form a topical /theoretical/methodical-based group and the institutional level (i.e. the research area within the institution/institute).

In order to be defined as a research group in the evaluation of social sciences, the number of researchers had to fulfil four specified criteria. In addition to common work on a joint topic, the Research Council required: 1) that the group should perform research at a high level internationally, and be able to document it through a set of sub-criteria; 2) the group should have at least five members at least three of whom had to be employed at the institution, and at least two of whom had to hold a tenured position; 3) the group had to have a specific intention/aim and an organisational structure, and it had to describe it according to the specifications listed in the matrix for the self-assessment report (cf. Research group self-assessment, Appendix E); and 4) the group should be registered in CRISTin (the Current Research Information System in Norway).⁹ For more details, please see SAMEVAL. *Innmelding av forskergrupper* [in Norwegian], Appendix D, see also Research group self-assessment, Appendix E.

⁹ CRISTin is a common, national system for registering scientific results and research activities. The members of CRISTin are the public research institutes, the universities and university colleges and the public health trusts: www.cristin.no.

Figure 2 The organisational units and entities in the evaluation of social sciences



1.3.3 Criteria for the assessment

All six panels based their work on a uniform set of criteria against which they reported their findings.

National research area

- Organisation, leadership and strategy
- Follow-up of earlier evaluations
- Research cooperation/networking (nationally and internationally)
- Research personnel: including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Interplay between research and education: impact on teaching
- Balance between teaching and research
- Societal relevance and impact
- Profile, strengths and weaknesses

Institution

- Organisation, leadership and strategy
- Institutional follow-up of previous evaluations
- Research environment
- Resources and infrastructure
- Research personnel, including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Interplay between research and education
- Societal relevance and impact

The research area within the institution

- Organisation, leadership and strategy
- Institutional follow-up of previous evaluations

- Research environment (i.e. seminars, summer schools, guest lectures etc.)
- Resources and infrastructure
- Research personnel, including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Interplay between research and education (including impact on teaching)
- Societal relevance and impact

Research groups

- Organisation, leadership and strategies
- Research personnel, including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Networking
- Interplay between research and education: (if relevant) impact on teaching
- Societal relevance and impact: (if relevant) exchange of knowledge / cooperation with other private and public sector actors.

See Appendix I for information on how the criteria were implemented.

1.4 Data and review process

The evaluation draws on a comprehensive set of data. The economic-administrative research panel based its assessment on the written self-assessments submitted by the institutions and a qualitative assessment of the submitted publications. Further bibliometric data from the analysis by Damvad Analytics, Denmark commissioned by the Research Council, and further data on the funding of social science were used to contextualise and/or confirm the panel's qualitative evaluation. The panel chair met with the institutions, primarily to supplement and clarify information provided in the self-assessments.

Building from the bottom, the assessments of individual scientific output fed into the evaluations of the research groups and research area, while the self-assessment reports for the research groups fed into the institutional research evaluation and the assessment of the research area. The self-assessments from the institutions contributed to the assessment of the research area within the institution. The report on personnel and bibliometrics (publications) was considered at the research group level, the institutional level and national research area level. Societal impact cases were considered at the group and area level. The research area evaluations were used by the field panels to build a picture of national performance within the research field covered by the panel reports.

The panels also based their assessment on data on funding and personnel, as well as information from earlier institutional and disciplinary evaluations from the Research Council and policy documents from the Government.

See Appendix G for information on time frames for assessments and bibliometric data.

Institutional self-assessment reports

Reports were submitted by all the research-performing units. They included quantitative and qualitative information at the institutional level (called level 1 in the self-assessment template), and at the level of the disciplines/research areas corresponding to the panels (called level 2 in the self-assessment template).

The following were enclosed with the self-assessments report from each unit:

- A list of the 10 most important publications for each research area;
- A list of 10 dissemination activities;
- Societal impact cases for each discipline showing important dissemination and knowledge exchange results, (the impact cases were optional);
- An analysis of strengths, weaknesses, opportunities and threats (a SWOT analysis)
- A form (number 2): Target audience for scientific publications;
- A form (number 3): Research matching the priorities set out in the Norwegian Government's Long-term plan for Research and Higher Education and in other relevant policy documents;
- An overview of study programmes.

The templates for institutional self-assessments and publications are attached to the report as Appendices C and J.

Self-assessment reports for research groups

The institutions were given an opportunity to include research groups in the evaluation. The reviews by the research panels were based on self-assessments and other documentation. The data included quantitative data on group members and funding, qualitative information on various aspects of the research activities and CVs for all the members of the groups. In addition, each group had the option of submitting one copy of a scientific publication for each member included in the evaluation, as well as case studies of the societal impact of their research.

The template for research groups is attached to the report as Appendices E and K.

Societal impact cases

Reflecting the novel approach of including societal impact in the evaluation (cf.1.2.1), the institutions were invited to include case studies documenting a broader non-academic, societal impact of their research. Participation was optional.

Bibliometric report

The Research Council of Norway (RCN) commissioned an analysis of publications and personnel dedicated to social science research for the evaluation, <https://www.damvad.com/uploads/Publications/Report%20%20Social%20Science%20in%20Norway%20v2.3.pdf>.

DAMVAD Analytics conducted the analysis, mainly basing its work on data from the following sources: the Norwegian Centre for Research Data (NSD); the Current Research Information System in Norway (CRISTin) and the National Researcher Register for which NIFU is responsible. DAMVAD Analytics added bibliometric data from Elsevier's Scopus database and Google Scholar to enhance the analysis of the internationally published scientific material.

The RCN defined the framework for Damvad's analysis, and decided to include the following elements:

- The total scientific output within social science for Norway;
- The institutions involved in social science in Norway;
- The research personnel engaged in social science in Norway.

For an overview of the publishing in economic-administrative research, please see Appendix F: Damvad Fact sheet for economic-administrative research.

Funding data

Data and information on financial resources and funding (cf. 2.2) are based on:

- Report on Science and Technology Indicators for Norway: (Norges forskningsråd, Det norske forsknings- og innovasjonssystemet – statistikk og indikatorer, Norges forskningsråd, Lysaker, 2016; https://www.forskningsradet.no/prognett-indikatorrapporten/Home_page/1224698172612)
- NIFU, Norwegian Research and Development (R&D) statistics and indicators, <https://www.nifu.no/en/statistics-indicators/nokkeltall/>
- Research Council of Norway, The Project Databank, <https://www.forskningsradet.no/prosjektbanken/#/Sprak=en>.
- The Research Council of Norway, Social sciences research in Norway 2010–2016: Funding streams and funding instruments. Report submitted to the principal committee for the Research Council's evaluation of the Social Sciences (SAMEVAL), report for internal use by SAMEVAL evaluators (ref. page 1, first section) unpublished report, undated (2017): 11 pages.

In addition, section 2.2 draws on:

- The Research Council of Norway, *Report on Science and Technology Indicators for Norway 2017*, The Research Council of Norway, Lysaker, 2017; https://www.forskningsradet.no/prognett-indikatorrapporten/Science_and_Technology_2017/1254031943643

Other relevant publications provided by the Research Council

Earlier evaluations commissioned by the Research Council

- Relevant disciplinary evaluations (please see the reference list for details)
- The Research Council of Norway: *Evaluation of the Humanities in Norway. Reports from the panels and the principal evaluation committee.*
- *Evaluation of the Social Science Institutes. Panel Report, January 2017*, the Research Council of Norway, Lysaker.

National plans and strategies for research policy

- The Research Council of Norway, *Research for Innovation and Sustainability. Strategy for the Research Council of Norway 2015–2020*, 2015.
- Kunnskapsdepartementet, *Meld. St. 7 (2014–2015), Langtidsplan for forskning og høyere utdanning 2015–2024*, [The Royal Norwegian Ministry for Research and Higher Education, Long-term plan for Research and Higher Education 2015–2024], 2015, [in Norwegian].

Official reports on the status of higher education:

- Kunnskapsdepartementet, *Meld. St. 18 (2014–2015). Melding til Stortinget. Konsentrasjon for kvalitet. Strukturreform i universitets- og høyskolesektoren*, 2015 [White paper, no. 18 (2014–2015), Concentration for quality. Structural reforms across the universities and university colleges, The Royal Norwegian Ministry for Research and Education, Oslo 2015] [in Norwegian].
- Kunnskapsdepartementet, *Tilstandsrapport for høyere utdanning 2017*, Rapport, 2017 [The Royal Norwegian Ministry for Research and Education, Status Report for Higher Education, Report, 2017] [in Norwegian].

1.4.1 Process and assessment tools

The Research Council set up 'SharePoint' (a Microsoft Office 365 program), and all background material and other data and documents were deposited there. The panel shared files and work in progress in SharePoint.

Panel meetings and work

The economics-administrative panel held three one-day meetings: in May and September 2017 and January 2018. In addition, the panel chair joined the other panel chairs for two one-day panel chair meetings, held in April and September 2017.

The chair carried out the interviews with the 20 institutions on behalf of panel during four days in late October 2017 (see section, meeting with the institutions). The panel secretary wrote minutes from the interviews. In between the meetings, the members were in contact through emails.

The panel divided the assessments and writing among the members. The secretariat from NIFU took the main responsibility for providing fact sheets, as well as chapter one and chapter two of the report.

Assessment tools

In order to ensure that all the dimensions were covered, and to ensure a uniform evaluation across the six different research areas, the secretariat at NIFU provided the panels with assessment tools.

These were:

- A template for research and scientific quality: numerical grading, see Table 1 below and Appendix H;
- A template for assessments of the units: institutions and research groups, see Appendix I;
- A template for assessment of the ten most important publications listed by the institutions, see Appendix J;
- A template for assessment of the publications of listed members of research groups, see Appendix K.
- The panels used the following description as the basis for their scoring of scientific quality.

Table 1 Scientific quality, numerical scale

Scale	Criteria
5 Excellent	Original research at the international forefront. The unit has a very high productivity. The unit [the institution /research group] undertakes excellent, original research, and publishes it in outstanding international channels for scientific and scholarly publications. Its researchers present ongoing research regularly at recognised, international scientific conferences.
4 Very good	Research with a high degree of originality, and a scientific profile with a high degree of publications in high quality channels for scientific and scholarly publications. The unit has a high productivity. The researchers participate habitually at international scientific conferences. The research is decisively very relevant to the knowledge production in the field internationally.
3 Good	Research of a good international standard. The unit has an acceptable productivity, and contributes to the development within its field. The researchers participate at scientific conferences.

2 Fair	Research of an acceptable, but moderate standard. The productivity at the unit is modest, and with few original contributions to the field internationally.
1 Weak	Research of insufficient quality and with a meagre scientific publication profile. The productivity is low.

Meetings with the institutions

The panels supplemented the written documentation and data with information provided by the institutions in interviews. The meetings took place at Hotel Park Inn within walking distance of Gardermoen Airport, Oslo. The six panel chairs conducted the interviews. Each institution was interviewed individually. The panels had prepared the questions beforehand and sent the list to the institutions two weeks in advance. The lists contained both general and panel-specific questions. The interviews allowed for elaboration and discussion of issues of importance to the panel's assessments. The panel's secretaries took extensive minutes of the meetings. The minutes were shared with all panel members.

Fact checking by institutions

Institutions were given the opportunity to provide a fact check of the assessment texts after the panels assessments were completed. The check did not include the grades or final evaluations, as the institutions were asked only to correct any factual errors. New and updated information was not included.

1.5 The panel's comments on the evaluation

- Several institutions have undergone organisational and structural changes during the time frame of the evaluation: many smaller institutions have been merged due to government decisions. These organisational changes made the evaluation more challenging from two aspects; on the one hand it was difficult to compare the present state/performance of the institution with the results of the previous evaluation in 2007. On the other hand, there have also been cases where the organisation or the structure of the institution that submitted the self-assessment has changed during 2017, since it was written. Therefore, during the personal interviews conducted in October, it was determined that the evaluation would not consider the latest status of those institutions.
- The institutions and research groups vary greatly in terms of 1) purpose – e.g. university or sector research institutions, 2) size – from very small to large and 3) type of research – from basic to applied research in certain areas. This naturally makes it more difficult to make fair comparisons and judgements.
- It would have been efficient if the RCN had provided the key bibliometric measures for all research groups – based on the institutions.
- The templates suggested a very in-depth evaluation, covering dimensions where hardly any information was provided ('Is the use of the external funding reasonable?'; 'Does the institution provide adequate resources and infrastructure, and how does the research group make use of them?'; 'Is the balance among the research personnel appropriate in terms of gender, age and diversity?'; 'Is there a transparent career path?'; 'How is the balance between teaching and

research?'. etc.). It took time to go through documents looking for information that was not there.

- Asking the institutions and research groups to submit articles indicated that the panels would assess these in a comprehensive manner. This was clearly a difficult task given the wide range of topics the members had to cover.
- Panel meetings, panel chair and secretary meetings and the 'interview meetings' at Gardermoen Airport in October have been very well organised by the Research Council of Norway.
- The assessors found that the time allocated for performing the evaluations was shorter than the actual time required by the task.
- A challenge we faced was that our judgements were really only based on the documentation, the bibliometrics and the extra (limited) questions we were able to ask later. In some cases, the reports were not very well prepared by the institution – either the information requested was missing or there were discrepancies between the different parts of the documentation. The additional questions asked at the airport meeting helped to clarify this in some cases, but seemed to add to the contradictions in other cases. In the end, this means the panel can only make a reasonable judgement based on the facts provided.

2 The context: Social sciences research in Norway and Economic-Administrative Research Area

The Norwegian research and innovation system is divided into three levels: the political, the strategic and the performing level. At the political level, the system is characterised by notable pluralism, as all the ministries are in principle responsible for financing long-term and short-term public research and experimental development activity (R&D) within their areas of responsibility. This governing principle for responsibility is called the ‘sector principle’. In practice, the R&D budgets are concentrated, as five ministries account for 85 per cent of public R&D expenditure. The Ministry of Education and Research alone allocates around 50 per cent of the total funding, and it is also responsible for coordinating national funding.

The second level is the strategic level, which includes the Research Council of Norway (and also an innovation agency, Innovation Norway); see more below. The Research Council fulfils functions that in many other countries are shared between a range of institutions at the second level. The same applies to the national innovation agency.

The third, performing level in the area of social sciences consists of a variety of institutions: universities, specialised universities and university colleges, as well as some private higher education institutions and nominally independent, public and private institutes. The institute sector is a common term for this group of units that is relatively heterogeneous in terms of institute size, profile and legal status. Overall, there are around 100 research institutions, about half of which are commonly referred to as research institutes. The group includes public oriented institutes and institutes that focus on private enterprise and carry out contract research for Norwegian and foreign companies, museums and hospitals (with the exception of university hospitals). The institute sector accounts for 23 per cent of the total national R&D. The institutions fall into three groups. First, the majority of the units (appr. 40) fall under the guidelines for governmental funding of research institutes and receive their core funding from the Research Council of Norway. With one exception, all the research institutes in this evaluation receive their core funding from the Research Council (for details see 2.1.1.). The second group consists of a few government research institutes, that receive their basic funding directly from a ministry. None of these government institutes is represented in this evaluation. The third group of institutions in the institute sector comprises about 40 private and public institutions, which to a greater or lesser extent perform R&D as part of their activity.¹⁰ Only one institution in this category is included in the evaluation of social sciences – the Norwegian Institute of Public Health (Folkehelseinstituttet).¹¹

The fifteen social research institutes included in this evaluation are mainly thematically oriented towards public management.¹² Their activities can be roughly divided into four thematic, partly

¹⁰ https://www.forskningsradet.no/prognett-indikatorrapporten/Tabellsett_2016/1254021688842;

(Indikatorrapporten, 2016, table B.03 instituttsektor [in Norwegian only].

¹¹ Statistics Norway’s (Statistisk sentralbyrå (SSB)) unit for research with 75–100 research positions is not included in the evaluation of economics; the same applies to Norges bank [The Central Bank of Norway], which has 10–15 research positions. SSB wanted to take part in the evaluation of economics, but since SSB had not reported its publication data to CRISin (in the years 2013–2016), the Research Council had to decline the request.

¹² RCN (2017): 37; https://www.forskningsradet.no/prognett-indikatorrapporten/Science_and_Technology_2017/1254031943643; For an extensive account of the social science institute sector, see RCN (2017b): 18–32.

overlapping areas: 1) international affairs and foreign relations; 2) environmental policy; 3) the economic foundation, structure and development of the welfare state, and 4) regionally based issues.

2.1.1 National funding streams and instruments

The main funding streams of relevance to the evaluation of social sciences are: 1) funding for universities and university colleges with an integrated R&D component, and 2) funds allocated via the Research Council of Norway (see below).

The universities and university colleges receive a substantial proportion of their R&D budgets as core funding from the government ('general university funds'). The funding is closely linked to student numbers and teaching positions. In this, the growth of social sciences in the higher education sector reflects the large number of students taking subjects such as economics and education. The social sciences and humanities receive the highest percentage of basic funding among the research fields. In 2015, social sciences received around 76 per cent of their R&D expenditure as core funding, whereas the fields of engineering and technology and natural sciences received just below 60 per cent as basic funding in the same year.¹³ Other sources of income include funding from the Research Council, the EU and other (national, Nordic and international) competitive funding bodies.

Research Council: core funding for public research institutes¹⁴

Unlike the universities, the research institutes rely heavily on a high share of external funding, through commissioned research and open competitions. As mentioned in section 2.1., the majority of these institutes fall under the guidelines for government funding of research institutes and receive their core funding from the Research Council. The Research Council administers the government core funding for all the 12 research institutes involved in this evaluation. The level of core funding varies from 6 per cent of turnover at the lowest, to 21 percent. On average, the funding is around 13 per cent for the units taking part in this evaluation.¹⁵ The core grant consists of two parts: a fixed amount, and an amount determined by performance. To qualify for a core grant, the unit must:

- Undertake research of interest to Norwegian business and industry, government or society at large;
- Maintain disciplinary and scientific competence, demonstrated through scientific publications;
- Conduct research activities on a sufficient scale to permit the development of significant competence and research capacity within the organisation;
- Have a variety of sources of research income and compete in open national and international competitions for research funding;
- Not pay dividends or provide, either directly or indirectly, benefits to the owner or close stakeholders.

The performance-based part of the core grant is aimed at achieving a sound balance between scientific quality and societal relevance. The distribution of this part of the grant is based on four performance indicators, weighted on the basis of a relevance component:

- Commission-based income from national sources (45 per cent)

¹³ NIFU, FoU-statistikbanken (NIFU, R&D statistics bank), 'Field of science. Source of funding. R&D expenditure, in NOK million, 2015; <http://www.foustatistikbanken.no>.

¹⁴ Technical term: Basic allocation to research institutes, cf. www.forskningsradet.no/eng, read 13.12.2017; Forskningsrådet, prosjektbanken.no, the core funding for all social research institutes was NOK 261.9 million in 2016, www.forskningsradet.no/prosjektbanken, read 14.12.2017.

¹⁵ NIFU, FoU-statistikbanken, (NIFU, R&D statistics bank), 'Key figures for research institutes, Current income by category of funds', 2016, <http://www.foustatistikbanken.no>

- Scientific publications, expressed as the number and level of scientific publications registered in the CRISTin database (30 per cent);
- Income from international sources (20 per cent);
- The number of doctoral degrees awarded to staff or students who are funded more than fifty per cent by the institute (5 per cent).¹⁶

The Research Council and the competition for national funding

The research institutes rely heavily on external funding. A substantial part of their income is commission-based funding, mainly from the public administration, such as ministries and government agencies at the national level. In addition, the institutes and the universities compete for the same financial support from national (and Nordic) sources, and funding from the Research Council plays a significant role in the institutes' knowledge production. The Research Council provides funding for a wide range of activities, ranging from research infrastructure and networks to programmes, projects and centres of excellence. Here, the focus will be on selected funding schemes of general importance to the social sciences: networking, centres of excellence, independent projects (FRIPRO)/ basic research programmes; policy-oriented programmes ('handlingsrettede programmer') and large-scale programmes ('store programmer'). Compared with natural science, technology and medicine, the humanities and social sciences display a more stable pattern in terms of funding schemes.

Since 2002, research groups have been selected for funding for up to ten years through a targeted centres scheme. The first round concerned general, disciplinary and interdisciplinary centres of excellence. Subsequently, new types of thematic, specialised, targeted centres have been established. All the centres have the same aim, however: to promote research of high scientific quality. Social scientists have been part of some of these centres and many of the groups have been interdisciplinary within the social sciences, but also across other fields of science.¹⁷ ESOP at the University of Oslo is one example. A spin-off effect has been the institutional initiatives, whereby universities have targeted existing research groups and established their own local groups and centres of excellence.

According to the RCN, there seems to have been a tendency recently to increase funding through large-scale programmes, especially in the fields of climate and energy research.¹⁸ The large-scale programmes are important for the social sciences as a whole. The thematic programmes are the RCN's response to the government's, long-term political priorities: the seas and oceans; climate, environment and clean energy; public sector renewal, better and more effective welfare, health and care services; enabling technologies; innovative and adaptable industry, and world-leading academic groups (cf. 1.2.1).¹⁹

¹⁶ Research Council of Norway, 'Public basic funding for research institutes', read 11.12.2018; https://www.forskningsradet.no/en/Public_basic_funding/1254010731867; NIFU, FoU-statistikkbanken, nøkkeltall for forskningsinstitutter [in Norwegian], www.nifu.no.

¹⁷ Research Council of Norway, centres of excellence: https://www.forskningsradet.no/prognett-sff/SFF_I/1253978073056; https://www.forskningsradet.no/prognett-sff/SFF_II/1253978083956; https://www.forskningsradet.no/prognett-sff/SFF_III/1253978083961; https://www.forskningsradet.no/prognett-sff/Nyheter/Ti_nye_sentre_for_fremragende_forskning/1254025392105/p1224067001855: Centres for Environment Friendly Energy Research (FME), https://www.forskningsradet.no/prognett-energiserter/Om_sentrene/1222932140880.

¹⁸ The Research Council of Norway, Social sciences research in Norway 2010–2016, unpublished report, undated (2017): 11 pages

¹⁹ Kunnskapsdepartementet (2014).

In 2016, social scientists at units in Norway received NOK 989 million from the Research Council (excluding core funding of the institutes);²⁰ 55.8 per cent (NOK 698.9 million) of the RCN support concerned programmes, while 11.5 per cent (143.7 million NOK) went to independent projects (FRIPRO). Researchers at the research institutes were involved in policy-oriented programmes to a larger extent than their peers at the universities, with 54 per cent (NOK 377.6 million) going to the research institutes, and 42.5 per cent (NOK 297 million) to the universities. A similar difference applies in relation to involvement in large-scale programmes: social scientists at the research institutes participated more often in large-scale programmes with national priority, especially in the fields of energy, climate, health and fish farming, than did their colleagues at the universities.

On the other hand, the universities received more funding from independent projects, NOK 77.7 million compared with NOK 45.5 million for the research institutes.

2.1.2 Internationalisation and international funding

The main sources of funding for research activities in Norway are national sources, but international funding has become more important in recent decades. This development is linked to a general trend towards internationalisation, which has been a hallmark of the Norwegian R&D system since the mid-1990s. Internationalisation is currently a notable dimension of the domestic R&D system.²¹ The indicators supporting this statement are many: at present, more than two-thirds of Norwegian scientific articles have a non-Norwegian co-author, compared with 17 per cent in the early 1980s.²² The number of Norwegian exchange students abroad has doubled since the mid-1990s, and the number of PhD students from abroad reflects the same trend. Twenty years ago, 10 per cent of doctoral degrees were awarded to foreign candidates, while in 2017 the percentage was 38.²³

From the mid-2000s, there has been a noteworthy increase in foreign R&D funding and strengthening of European research cooperation.²⁴ In this context, the EU's research programmes have been an influential force. Until the Seventh Framework Programme (2007), the EU programmes were generally of limited scope, with the main emphasis on technology and applied research. Since 2007, budgets have increased significantly, due to the portfolio of programmes and a support mechanism that has embraced a wider set of topics and goals. The EU's programmes now include a broader range of research-performing units and areas – also social sciences. Hence, at present, the EU Framework Programme is an importance source of funding for many countries, Norway included. At the domestic level, a number of measures have been put in place to strengthen Norway's participation in the programmes. By June 2017, 1.81 per cent of the funds announced in Horizon 2020 (H2020) were awarded to researchers and institutions in Norway. The success rate is slightly below the official target of 2 per cent of total EU funding.²⁵

Among the seven Societal Challenges targeted by H2020, the fields most relevant to social scientists are the challenges: 'Europe in a changing world' (SC6) and 'Secure Societies' (SC7). In addition, challenges related to health and demographic change and to climate and environment are of relevance to social scientists. Within H2020, efforts are made to mobilise the disciplines of social sciences and humanities across the framework programme. The reason for this is that the perspectives of social sciences and humanities are seen as valuable in the development of interdisciplinary approaches to

²⁰ This description is an overview and includes funding for all areas and units defined as social sciences in Norway. It thus encompasses institutions and researchers not listed for this evaluation.

²¹ RCN (2017c): 6–7; see also pp. 56–61.

²² RCN (2017c): 59–60; 69.

²³ RCN (2017c): 7, 49, 63.

²⁴ RCN (2017c): 56–58.

²⁵ RCN (2017c): 6; 72.

the European and global challenges.²⁶ The Norwegian success rate within Societal Challenges was above the 2 per cent target. In June 2016, the success rate reached 2.6 per cent.²⁷ According to the RCN, above average success rates in SC6 and SC7 indicate a clear engagement on the part of Norwegian social scientists in relation to these parts of the Societal Challenges.²⁸ The results for the H2020 excellence schemes are below average, however.²⁹

2.2 Economic-Administrative Research Area

2.2.1 Introduction

Economic-Administrative research in Norway takes place at a number of different institutions. Research in this field is carried out at traditional universities, newly merged universities, university colleges, research institutes and pure business schools.

While economic research in Norway was evaluated in 2007, the Economic-Administrative research area has not previously been assessed separately by the Research Council of Norway (RCN). This does not mean that all the institutions in the Economic-Administrative panel have not been evaluated before. In fact, several institutions were included in the previous evaluation, including some of the institutions currently being studied in the Economic-Administrative area.

There are 995 listed researchers for the Economic-Administrative research area, which is almost 1/3 of the total number of researchers in SAMEVAL. This number affirms that this is a large research field within the social sciences in Norway.

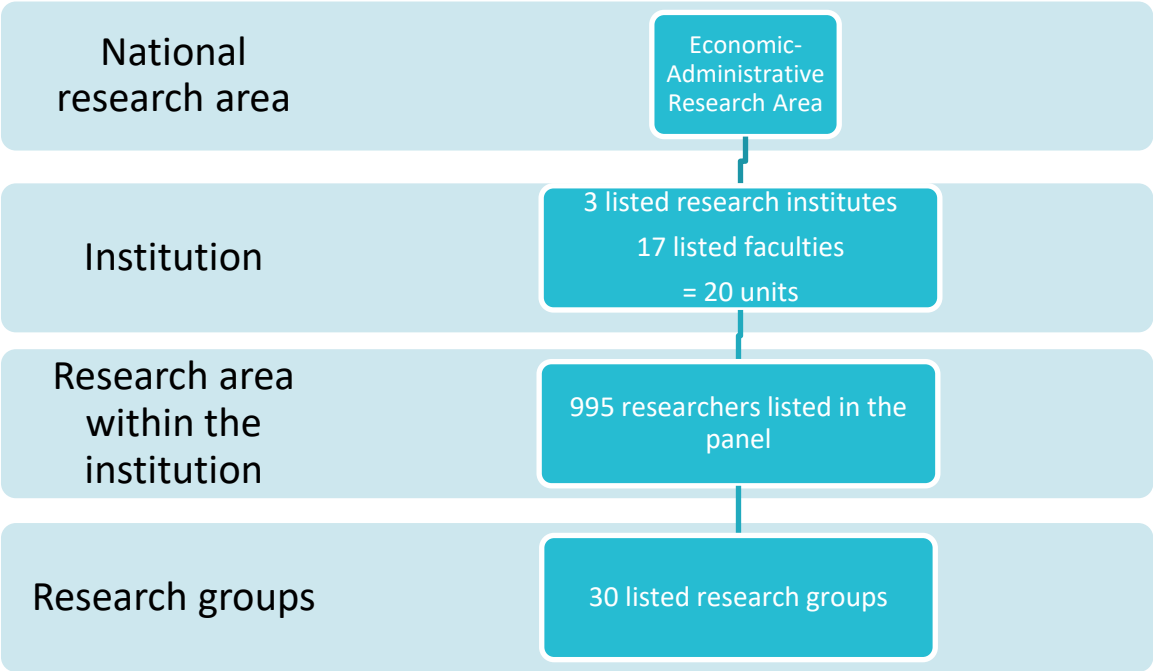
²⁶ The Research Council of Norway, Social sciences research in Norway 2010–2016: Funding streams and funding instruments, unpublished report, undated (2017): 11 pages.

²⁷ (2017c): 71–72.

²⁸ The Research Council of Norway, Social sciences research in Norway 2010–2016: Funding streams and funding instruments, p.11. As of March 2017, the amount of funding for social scientists is: SC6, NOK 78.3 million + SC7, NOK 130.4 million = NOK 208.7 million of a total of NOK 1,874 million, or 11% of the total funding available.

²⁹ (2017c): 11.

Figure 3 The units and numbers in Economic-Administrative Research Area



3 Bergen University College, Faculty of Engineering and Business Administration

Bergen University College, Faculty of Engineering and Business Administration							
Units included in the evaluation of economic-administrative research	- Mohn Centre for Innovation and Regional Development (Formerly: Centre of Innovation, renamed in December 2016)			Listed researchers	13		
				Listed research groups	1		
				No. of researchers in listed research groups	13 (13 CVs)		
Other units of the faculty (institution)	Department of Business Administration			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	-/1	1/-	-/-
R&D expenditures and sources of funding (1000 NOK)				Total per year	1	1	-
				No. of positions announced / No. of qualified applicants per year			
Funding of the institution				PhD positions	-/-	1/15	2/18
Total expenditures	162 500	174 500	186 800	Post.doc positions	-/-	-/-	-/-
Types of funding				Permanent positions	-/-	1/8	2/13
				Education			
Core funding from the Norwegian gov.	166 600	179 300	184 152	Study programmes BA level			
External funding, RCN	4 543	3 000	5 201	-			
External funding EU	0	0	298	Study programmes MA level			
External funding, other sources	3 596	2 170	6 316	- Innovation and Entrepreneurship - Innovation Management			
				Other			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

3.1 Economic-Adm. research at the institutional level

The self-assessment submitted by Bergen University College, Faculty of Engineering and Business Administration (HiB) preceded the planned merger of the institution with Sogn og Fjordane University College and Stord/Haugesund University College to form the newly established Western Norway University of Applied Sciences effective from 1 January 2017. However, as a result there was uncertainty in the self-assessment about some important features of the new university to which it would belong. As a result, many important lines of future strategy and organisation are unclear. This lack of certainty is perhaps to be expected, but it also poses some difficulties for the review panel. It also gives grounds to question why HiB has entered into a merger when many important lines of future strategy and profile remain unclear. The faculty is one of the three HiB faculties together with the faculties of social sciences and education. The HiB faculties are led by their respective deans who in turn report to the research vice-rectors for research or teaching. The faculties are to be managed under the current working models until January 2018. At the present time, HiB had approximately 700 staff and 7,000 students. The new university will have approximately 16,000 students and will be one of the largest in Norway.

3.1.1 Organisation, leadership and strategy

At present there is no official strategy in place for the new merged university. Accordingly, the post-merger organisation and leadership of the faculty was not clear at the time of submission of the self-assessment. The faculty has seven departments, including the Department of Business Administration as well as the Mohn Centre for which a self-assessment is submitted. The merger is likely to bring about some changes to the organisation and leadership of the faculty. The merger will result in a substantially larger institution in terms of the number of students and research capacity and, as a result, is likely to require some reorganisation and leadership changes.

It is safe to assume that the organisation of the faculty is set to undergo changes in the near future. Among these, it is possible that a larger new university will consider separate academic entities for the engineering and business administration departments. It can, however, be pointed out that the current organisation, although somewhat unconventional, presents certain advantages for applied and interdisciplinary research, which is the focal part of the new university's activities. Hence, a new organisation of the university will have to provide a framework that promotes inter-disciplinary research.

3.1.2 Institutional follow-up of previous evaluations

HiB has not been part of the previous assessments by the RCN.

3.1.3 Resources and infrastructure

The current state of infrastructure and resources at the faculty is not sufficiently clear from the present submission. However, the current arrangements will be revisited with the pending merger. The Mohn Centre is stated to play a role in the provision of infrastructure services to the faculty. It is therefore useful for the future to draw lessons and learn from this centre's organisation and working arrangements and replicate where possible. Having a research library will support the enhancement of research activities and PhD studies at the new university. Moreover, the Office of Research Administration can play an important support role in securing research grant income. Combining the resources from the three merging institutions will be important in developing research capacity.

3.1.4 Research environment

Some strong external and international links are mentioned, although they are not detailed in the submission. However, the Mohn Centre is referred to as a good model for organised research and staff development. It is likely that having a well-functioning model research centre will also be beneficial to the new university in the near future. The submission recognises the importance of external and international collaborations for PhD and staff development, although the extent of the existing research-related collaborations has not been described here.

3.1.5 Research personnel

The submission signals that it recognises the importance of recruitment for achieving future development goals. For instance, reaching out to a wider and more international audience for recruitment rounds is a positive step. It is not clear how this will be in line with the language of teaching and instruction. It is also unclear how effective this strategy has been to date. A clear sabbatical policy can be important for staff development and for attracting suitable candidates initially. It is positive that diversity is also mentioned in the form of cultural diversity, but also here evidence of progress is not described. It is noteworthy that the number of applications in response to the advertised permanent posts has been lower than the number of PhD applications.

3.1.6 Research production and scientific quality

Prior to the planned merger, the faculty was in the process of building up its research capacity. HiB decided in 2010 to develop PhD programmes and had received accreditation for a PhD programme in the faculty in 2014. A total of nine articles have been submitted for this assessment. However, none of the submitted articles show evidence of international collaboration in research. These publications are mostly from recent years. This suggests the existing links are not strong or that they are not utilised effectively.

Assessment of scientific quality: 2 - fair

3.1.7 Interplay between research and education

The university has a student to staff ratio of approximately ten to one, though it is not clear whether staff refers to the faculty members or the definition extends to all academic and non-academic members. Maintaining a relatively low ratio presents opportunities for research-led teaching in a university specialising in applied science and research. However, this will require a suitable balance between research and teaching activities in the new post-merger organisation that benefits students at all levels as well as both junior and senior staff.

3.1.8 Societal relevance and impact

The mission of the new university, with a strategic focus on applied science and research as well as emphasis on areas such as innovation and regional development is inherently highly socio-economically relevant. A split campus organisation for the new university may not be optimal in terms of the allocation of resources. However, this can potentially provide a wider geographic reach to engage in regional development and better interaction with the business community and public sector in Western Norway.

3.1.9 Overall assessment

The profile and scientific quality of HiB is broadly comparable to that of the other regional universities. This implies that there is clearly scope for enhancing the research potential. There may be new possibilities, but also challenges associated with achieving this goal for the new merged university. The

university's specialisation in applied sciences and regional development offers very good opportunities to achieve impact and societal relevance.

3.1.10 Feedback

The faculty's current organisation chart identifies the potential areas for interdisciplinary research. This is a useful feature also for the structure of the new university post-merger, given its emphasis on applied research and innovation. The wider post-merger geographic reach of the new university is suitably commensurate with its research focus.

A number of strategies and policy documents for the new university are to be decided in the near future. This clearly offers an opportunity to reassess and strengthen the level, funding and quality of research activities. A good starting point and signal in this context would be the implementation of HR Excellence in Research.

3.2 Research group: The Mohn Centre for Innovation and Regional Development

The Mohn Centre is a research and competence centre established in 2007. The Mohn Centre works on topics spanning innovation, entrepreneurship and regional development. The centre is also active in facilitation and education in innovation and regional development. The centre is located at the newly-formed Western Norway University of Applied Sciences (HVL). The centre staff currently consists of 13 researchers including three professors, one adjunct professor, four associate professors, one academic researcher and four PhD students. In addition, two of the staff members are involved in the facilitation and promotion of innovation in the private and public sectors in the region.

3.2.1 Organisation, leadership and strategies

There is limited information in the submission in terms of the organisation and leadership structure of the centre beyond that it is organised under the Faculty of Engineering and Business Administration and that it has a director or leader. From 2018, the centre will be part of the Faculty of Engineering and Science. It is likely that the centre will continue to grow further in the coming years. If this is the case, it will be necessary to introduce a more structured leadership and strategy to guide the centre's activities going forward.

The centre is not large (though larger than some of the other groups) in terms of the number of staff, but the members' academic backgrounds already constitute a multidisciplinary environment. It is positive that the recruitment strategy is not only limited to social sciences, but, as the subject areas require, extends to natural science as well.

3.2.2 Research personnel

Linking the new PhDs to the research centre, as is the current practice, will help to advance the candidates' research and social development. At the same time, in order to increase the size of the PhD programme, the number of staff will also have to increase in the coming years. The new PhDs will also have to come from different, but relevant disciplines. In addition, involving the PhDs in the centre's research projects will be positive for their career development, but also for recruiting suitably qualified new PhDs in the longer run.

The current division of work, based on a ratio of 50% research, 30% teaching and 20% other activities, is healthy and conducive to research, and on the whole more generous than some of the other

institutions. We assume that this arrangement extends to both junior and senior members of staff. However, the current policy regarding research leave only extends to professors. This has not been justified in the submission. In addition, the possibility to take research leave is only available every eight years, which is somewhat below the norm for many research-intensive institutions. The absence of a competitive research leave policy will have a negative effect on the career development of the younger members of staff and even on the recruitment of new staff. It is possible that a better research leave policy can be turned into a recruitment strategy, rather than being a disadvantage in competition with other institutions.

3.2.3 Research production and scientific quality

The submission states that the centre's staff has contributed to 48 peer-reviewed publications during the 2013-2016 period. Given that the number of academic staff is eight, this is a reasonable level of productivity. The nine submitted articles are in recognised journals. However, the authorship of these articles does not reflect any evidence of international research collaborations. This implies that the institutional links can be better developed and utilised in the future.

The disciplinary backgrounds of the current members of staff and the PhD students indicates some of the diversity required for a research focus on topics related to innovation, entrepreneurship and regional development. However, the diversity of educational backgrounds, i.e. the institutions where the staff gained their qualifications, is relatively limited. The diversity strategy should also aim to widen the range of backgrounds and educational experience of the staff, and not only their disciplines.

3.2.4 Networking

The submission recognises that external and international networks are important, and they are in place to some extent, although their nature and scope are not detailed. However, as mentioned in the above, these contacts are not reflected in the authorship of the research outputs presented as part of the submission. There is evidently a need for a more result-oriented networking effort and strategy. There are networks with local businesses and authorities; but this can certainly be expanded given the field of research. Evidence of effective networking could also be in the form of external funding and research output.

3.2.5 Interplay between research and education

The centre's staff members contribute to teaching two master's programmes at the Department of Business Administration. The teaching is based on the relevant areas of research conducted at the centre. The staff are also involved in teaching in other departments at the university. This has sometimes led to master's students participating in the centre's research, leading to published research in scientific journals. This is a good measure of the success of the interplay between teaching and research.

3.2.6 Societal relevance and impact

The centre's research areas are potentially highly interesting, important and socially relevant for both the business and public sector, especially in the context of regional economic development. The formation of the new university can open up further new possibilities and the centre's geographic reach. The utilisation of this potential may currently be limited by the scope of the resources available to the centre. An impact case study presented, based on counselling for regional innovation and cluster development, is representative of the type of research and benefits that could be expected from the centre. However, the impact study is somewhat general and broad in establishing the stated causal

effects of specific research outcomes. The group is engaged in knowledge activities and the challenges in the future will be to demonstrate the clear impact of these activities.

3.2.7 Overall assessment

The centre has a viable and socio-economically useful research focus. It is also still a relatively young research group. It is set to grow in size in the coming years. However, prior to this, it will be advisable to develop strategic, leadership and recruitment objectives to guide a managed growth path for the centre.

Assessment of research group: 2 - fair

3.2.8 Feedback

The centre has clearly identified an interesting and important research area with considerable societal and economic relevance. The centre is clearly able to grow in size in the coming years, but will also need institutional support to achieve its potential. The new university can take this into account and allocate the appropriate resources to the centre to prepare for and manage its forthcoming growth. There is also potential to develop the external funding base together with the local business community and authorities.

However, the centre also needs to prepare for this, mainly by developing suitable leadership and a strategy for the future. Judging by the publications submitted, there is currently no indication of international research collaboration that culminates in joint research output. If the centre wishes to achieve more recognition, it must recognise that international collaboration, diversity, recruitment strategy, funding sources, and research output are all inter-related, and need to be part of the centre's new strategy for the coming years.

4 BI Norwegian Business School

BI Norwegian Business School							
Units included in the evaluation of economic-administrative research	Depts. of: Marketing, Strategy and Entrepreneurship, Leadership and Organizational behavior, Communication and Culture, Accounting, Auditing and Business Analytics, Law and Governance			Listed researchers	111		
				Listed research groups	2		
				No. of researchers in listed research groups	16		
Other units of the institution	Dept. of Economics Dept. of Finance			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	6/3	2/4	7/2
				Total per year	9	6	9
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year			
	2014	2015	2016				
Funding of the institution				PhD positions	3/58	12/243	6/20
Total expenditures	1 406 971	1 451 342	1 531 834	Post.doc positions	2/100	0/0	11/550
Types of funding				Permanent positions	12/121	8/43	7/178
Core funding from the RCN	258 078	263 916	277 504	Education			
External funding, RCN	13 485	11 052	9 407	Study programmes BA level Business Administration, Creative industries, Entrepreneurship and Economics, Retail Management, Economics and administration, Economics and business law, Economics and administration with accounting education			
External funding EU	0	212	159	Study programmes MA level Siviløkonom: Microeconomics, Finance, Business law, Strategic Management, Leadership and organization psychology, Accounting and auditing, Strategic Marketing leadership			
External funding, other sources	23 640	22 469	19 847	Other Green growth and competitiveness, Health leadership			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

4.1 Economic-Adm. research at the institutional level

4.1.1 Organisation, leadership and strategy

BI Norwegian Business School is a private institution founded in 1943, which charges tuition fees from students. BI is currently a 'Triple Crown' school with international accreditations from AACSB, EQUIS and EMBA. This is a noteworthy sign of quality. The board, which appoints the president and the provosts is responsible for the overall supervision of the school. The highest decision-making authority on academic matters is the senate, on the mandate of the board. The responsibilities of the two provosts are divided into research and academic resources, and academic programmes, to support the two primary roles of the school. Since 2016, the school has also had an international advisory board, an independent council to help BI with its internationalisation and globalisation strategy.

The BI units included in the evaluation of the Economic-Administrative research area include the departments of Marketing, Strategy and Entrepreneurship, Leadership and Organisational Behaviour, Communication and Culture, Accounting, Auditing and Business Analytics, and Law and Governance.

Research at BI is largely organised in research centres with the active engagement of business companies as stakeholders. The research centres listed in the self-assessment are primarily engaged in the fields of economics and finance, both specifically in energy, construction and creative industries as well as in more general research (e.g. a multidisciplinary research centre on the internet and society). Research is also organised through formal and informal research groups within and sometimes across departments.

The strategic focus of the school is on R&D, which receives a high level of internal funding and about 50% of the faculty's person-hours are spent on R&D activities. Investment in R&D activities seems to have paid off with several H2020 grants (in 2014 and 2016).

The overall strategy of BI is described in terms of 'must wins', which are related to achieving top five status in Europe for at least four disciplines, being able to offer internationally preferred programmes in line with student expectations and excellent graduates, and being the preferred partner for business and the public sector.

4.1.2 Institutional follow-up of previous evaluations

In the previous 'Economic research in Norway' evaluation from 2007, the Department of Economics and the Department of Financial Economics were evaluated as 'very good', but not yet 'excellent'. These departments are not part of this evaluation.

4.1.3 Resources and infrastructure

External funding is expected to increase over the next few years with the increased capacity to develop large, competitive research applications. What this enhanced ability is based on, however, is not clear from the self-assessment, especially as the strategically important funding from the RCN is reported to have decreased from 2015 to 2016. Overall, external funding is reported to have made up 1.9% of the total expenditure on R&D in 2016, which is quite modest.

4.1.4 Research environment

The research-related goals are being addressed through a greater focus on publication outlets with high ABS ranking and a focus on the international recruitment of young talent. This is a realistic approach, which will take some time, but is likely to yield good results. On the business and public-sector side, a partnership programme is expected to result in improving the quality of interaction with

businesses and in facilitating the creation of new and sustainable business. The system of endowed professorships (currently four) is a good example of the benefits of the partnership programme. Another benefit is the recruitment of 'Industrial PhDs', i.e. PhD students sponsored by large business companies, whose number is expected to increase. The School also runs Executive Programmes for the corporate world.

4.1.5 Research personnel

BI reports to have a plan for diversity and equality to ensure that all employees have equal rights, obligations and opportunities. As seems to be the case in many academic institutions in Norway and elsewhere, BI places special emphasis on increasing the proportion of women in the roles of professor and director, as well as in management and governance. Its aim to increase the number of men in administrative positions is somewhat novel. This can also be seen as a positive tactic for addressing the gender differences in different areas of the school's administration and governance. The proportion of women in full-time professor positions is currently 29%, while the genders are more balanced in management, on the board and senate. Gender issues are also the topic of some research projects.

In the self-assessment, the various disciplines covered by this panel are reported to have similar recruitment processes, which utilise annual international conferences. This can naturally be expected to lead to international recruitments, but as most bachelor's programmes are taught in Norwegian (or another Scandinavian language), all the positions are not subject to genuine international competition.

By year-end 2016, BI had 26 female professors in full-time positions, an increase of seven professors from 2015. This puts the proportion of female professors at 29% of those in a full-time position. The female proportion of professional full-time positions has increased from 28% to 31%. Women accounted for 33% of top management, 38% of departmental management and 50% of deans. The proportion of women directors at BI was 63%. Women accounted for 50% of the board and 27% of the senate. The percentage of men in administrative positions was 34%.

Diversity and equality issues are also closely monitored in the PhD programme. In 2016, two of the nine PhD graduates were women, while the number was four out of six in 2015. Twelve (goal 15) PhDs are currently produced annually (nine in 2016 in Economic-Administrative research). Several measures (not specified in great detail) are being implemented to further increase the quality of the PhD programme. The BI PHD programme offers specialisations in Economics, Finance, Marketing, Strategy, Leadership and Organisation, and Innovation and Entrepreneurship. Of the 54 current doctoral candidates, 15 are financed by external actors or the RCN. In addition to taking courses at BI (some shared by the specialisation) and other institutions, the candidates have teaching duties. The research side of the PhD education is organised such that each candidate is assigned a supervisor (and possibly a co-supervisor). The students are expected to attend departmental research seminars where they present their own work, as well as at various leading international academic conferences, with the aim of enhancing candidates' development and their subsequent job-market entry. The structure of the PhD programme is systematic.

4.1.6 Research production and scientific quality

The scientific positions are reported to be equally divided in terms of research and teaching, meaning greater teaching obligations than in state-funded universities. The scientific and teaching staff are, however, entitled to apply for additional time to be allocated to research, and all full-time employees in permanent positions are entitled to sabbatical leave or a professional development term. It is not clear from the report to what extent these measures are used, or their impact on research output.

BI supports the competence development of its researchers by encouraging participation in and organising different courses and workshops. Supervision and mentoring of younger researchers by more senior staff is also encouraged, as is internal collaboration across the school's units.

In terms of research output quantity, the group of 111 researchers published 224 scientific articles and gave 191 conference presentations in 2016. The group is involved in EU and RCN projects as well as corporation-funded and institution-funded projects. The research conducted covers a range of issues and disciplines, as well as a whole array of different research methods. The fact that the researchers in the group have published influential articles in some of the most prestigious journals, including *Academy of Management Journal* and *Strategic Management Journal*, is a sign of the excellent quality of its research. In general, evaluation of research quality is based on the Norwegian research outlet classification system, but also the stricter AJG (previously ABS) journal ranking system (and equivalent). The primary audience for publications is the international academic community.

Assessment of scientific quality: 5 - excellent

4.1.7 Interplay between research and education

There is reported to be a direct link between research and teaching at all levels of education (bachelor's, MSc, PhD and executive programmes). Top level journal articles published by the faculty are used in teaching several courses. In an ongoing initiative, syllabi are being amended to highlight BI's original research. These are excellent ways of incorporating the newest knowledge into teaching, and also of demonstrating the value of research at many levels to students. Many MSc students are reported to be involved in research as student assistants, but the number is not disclosed.

4.1.8 Societal relevance and impact

BI researchers contribute to research areas that are classified as thematic priorities by the Norwegian Government, largely through 13 centres covering a wide range of areas (e.g. business history, corporate communication, creative industries, green growth and health care). Two new research centres are being developed in the areas of 'ocean and energy business' and 'multisensory marketing'. New knowledge is disseminated through these centres as well as through the media. Indeed, BI seems to have generated a significant number (3,390) of media hits in 2016, signalling societal relevance and public interest.

The case study provided in the evaluation package outlines a project entitled 'Knowledge-based Norway' with impact on the transformation towards knowledge-based industrial public policy and very broad knowledge dissemination. The project builds on earlier projects and employs mixed methods in studying 13 Norwegian industry clusters. The project team included research from BI and several other institutions and organisations. In addition to policy implementation, the project resulted in a great number of public presentations and several publications.

4.1.9 Overall assessment

BI is a strong institution supported by a good funding structure, which operates efficiently. Proper attention is paid to diversity and the faculty is quite international. Its physical location in Oslo (compared to smaller cities in Norway) is probably beneficial in the recruitment of international talent. The faculty is able to produce high-quality results.

4.1.10 Feedback

BI is quite evidently doing many things right and well, and it should keep up the good work. The efforts to increase diversity and internationalisation particularly seem to be paying off, and should be a continued focus also in the future. Attention should be paid to 1) integrating non-Norwegians into the institution, and 2) addressing the balance between research and education, and offering equal opportunities to both local and international staff. This also calls for the language of teaching to be considered, which is now largely Norwegian at MSc level.

4.2 Research group: Consumer Research

The Consumer Research group is under the Department of Marketing at BI. Its formation was based on joint interests and a joint international scientific network including several members from the Department of Marketing. Its primary objective is to contribute to consumer science.

4.2.1 Organisation, leadership and strategies

This is a fairly small group, consisting of six members: five listed as permanent researchers and one as temporary. The most senior member of the group is a professor; three are associate professors, and two are assistant professors. The composition of the group is stated to combine the efforts of local stakeholders with the hiring of highly research-oriented international staff. Since its international expansion, the group has had a continuous presence of one or two doctoral students.

There is no formal leadership structure; rather, the members are reported to work together in various constellations, depending on ongoing projects. These constellations include doctoral students and external partners, some of which are very close associates, participating in several projects. Even though the group seems to produce good results in terms of publications as it is, some form of leadership structure could be beneficial in ensuring a successful strategy for the group and, for instance, in applying for external funding.

The group's research focuses on the science of consumer behaviour, with the clear aim of producing publications in the top journals in the specific field of consumer research, as well as in the wider discipline of marketing and other related disciplines, in particular social psychology.

At the time of writing the self-assessment report, the group had not attracted any external funding. The members of the group are, however, planning to apply for external grants from national and European sources. No details as to the size or exact focus and purpose of the planned grant applications are provided.

The group states that its objectives and strategy fit within the research ambitions of BI and the Department of Marketing are, to [*contribute with research at the top international level [...] to new knowledge that provides better decisions, smarter ways of doing things, as well as new products and services*]. At least as far as publishing is concerned, this seems a valid statement. In the past five years, the members of the group have published in highly-ranked outlets, including the Journal of Consumer Research (ABS: 4*), Journal of Consumer Psychology (4*), Journal of Personality and Social Psychology (4), International Journal of Research in Marketing (4), Journal of Experimental Psychology: Applied (4), Journal of Retailing (4), Journal of Business Research (3), Marketing Letters (3) and Psychology & Marketing (3).

The most important resources provided by BI for the group are those provided by the BI library, in the form of access to academic journals in business, social sciences, psychology and life sciences. The

library's assistance in registering the group members' publications in CRISTin (the Norwegian research information database) is also valued by the group. The group also utilises the BI lab for experimental research, and an additional lab, which is stated to meet the standards of international highly-ranked institutions, is currently under construction.

4.2.2 Research personnel

The group does not have its own hiring and career development processes, but this is attended to at department level. The department follows a tenure track model when recruiting for junior positions, which is consistent with international best practice. The general hiring philosophy is to balance the needs of teaching and community service with best available research talents. When a consumer behaviour scholar is being recruited, the group is consulted by the department chair and the group members serve on the search and interview committees. In the case of tenure decisions, the senior members of the group are involved.

PhD students are not recruited directly by the group. Instead, the Department of Marketing at BI recruits PhD students (every two years), and after the first year of taking courses and seminars, they look for a potential supervisor. The group currently supervises and co-supervises three PhD candidates, and new students are expected to join the group during the 2017-2018 academic year. Several of the graduated PhD students have continued in academia, currently holding positions in Norway or abroad. This is a good indication of the high quality of the PhD training. Postdocs are hired on temporary assignments, when possible.

Even though BI has announced a special focus on increasing the proportion of female professors, directors, the management and governing bodies, all of the members of the Consumer Research group are men. Of the six men, half are in the age group 30-39 years, two in the range of 40-49 years and one in the 50-59 years group. The group is, however, quite international, with two Norwegians, a Belgian, a German, a Swede and a Colombian.

PhD students in the group regularly participate in international conferences and doctoral colloquia. PhD students also go on extended (> 6 months) overseas research stays (e.g. UT Austin, USC and Columbia University). These international visit periods seem systematic, but it is not clear whether a visit abroad is a required part of PhD studies.

4.2.3 Research production and scientific quality

Consumer research is an established field of academic inquiry with its two flagship journals (Journal of Consumer Research and Journal of Consumer Psychology), both with ABS 4* status. A lot of consumer research is also published in general marketing and business journals (e.g. Journal of Marketing, Journal of Marketing Research, International Journal of Research in Marketing, Journal of Retailing and Journal of Business Research).

As for the group's strategy to 'cover all areas of experimental consumer research', the current areas of focus include a range of topics in the field. The members of the group have also published widely, also in top journals, within the different themes. Furthermore, the manuscripts reported to be in the process of being submitted to different high-quality outlets indicate continued efforts to further strengthen the impact and profile of the group.

In addition to marketing, the research conducted in the group draws from other, related disciplines, including organisational studies and psychology.

The group's publications have clearly contributed to the state of the art in the field, also in the form of a textbook.

4.2.4 Networking

The group members regularly attend and maintain a visible presence in the relevant major academic international conferences, and are also involved in organising them. The group collaborates actively with Norwegian as well as international researchers, as indicated also by its joint publications.

Particularly considering the small size of the group, the collaboration networks seem very extensive.

4.2.5 Interplay between research and education

The group contributes to teaching at all levels at BI, with two courses at BA level, three courses at MA level and one PhD level course. The group is responsible for one PhD course (in consumer research) that is attended by all marketing PhD students.

The most senior member of the group is also involved in an international PhD seminar in consumer research in Brussels. Judging by the titles of the courses offered, they are well within the research areas of the group, suggesting a beneficial relationship between research and educational activities.

The group also reports to actively mentor advanced master's students, who are engaged in running experiments in the labs and who are expected to be interested in PhD studies and an academic career.

4.2.6 Societal relevance and impact

The group members collaborate with non-academic and industry partners, both Norwegian and international. The group also serves as a centre of expertise for industry and publishes in industry-oriented outlets.

4.2.7 Overall assessment and feedback

The Consumer Research group at BI is scientifically a very strong group. It produces regular high-quality publications and is well integrated into the education activities at the Department of Marketing. It is international by composition and through its networks. The gender imbalance (currently, all seniors are male) should be addressed. Furthermore, the lack of any formal leadership structure may become an issue at some point, and such leadership could be useful in raising external funding.

Assessment of research group: 5 – excellent

4.3 Research group: Leadership and Organisational Productivity

The overall aim of the research group Leadership and Organisational Productivity is to contribute to research in organisational behaviour (OB) and human resource management (HRM) that focuses on predicting individual, team and organisational productivity by publishing in top international journals within these fields.

4.3.1 Organisation, leadership and strategies

The group has previously functioned as an informal research group that has shared the responsibilities for PhD students and where different members have co-authored numerous international peer-reviewed articles and book chapters together. They are now in the process of formalising the cooperation by establishing a formal research group.

BI has a vibrant experimental research environment, with investments in the facilities for lab research. New facilities were scheduled to be in place by December 2017.

External funding only includes Norwegian public and private sources, and no international sources. Several of the group members have received external funding from a wide range of sources, but not as a group. The group intends to apply for a national research centre. The Research Administration Office (RMO) at BI Norwegian Business School assists researchers who want to apply for external funding. BI also charges tuition fees.

The group has top international research and publications. It wants to attract more PhD scholars and create new partnerships for the private sector. Several measures have been implemented in order to further increase the quality of the doctoral programme.

4.3.2 Research personnel

New recruits are mostly at associate professor level, or, in exceptional cases former PhD students. Following the BI policy, assistant professors have 50% teaching time, 50% research time, with an evaluation every year. Decisions on tenure positions are made after 3.5 years.

PhD students have been recruited nationally and internationally. In recent years, recruitment from academic institutions in other countries has increased. PhD positions are always advertised in easily accessible international channels.

The group members act as supervisors for PhD students in a PhD programme dedicated to Leadership and Organisational Behaviour. The group's leader is associate dean for this programme. All the group members have extensive experience of advising doctoral candidates.

PhD students are encouraged to spend time at international institutions.

4.3.3 Research production and scientific quality

A particular strength of the group is the mix of quantitative and qualitative research, field and laboratory research, mixed methods and novel research. The list of publications in high-ranking international journals is impressive.

The group members are mainly members of the largest research department at BI Norwegian Business School and have also been among the most productive professors in terms of research publications (one of the members received the 2016 BI Norwegian Business School research award for outstanding research, an award that is handed out every third year), research knowledge dissemination and teaching (especially at the MSc, PhD and executive levels both nationally and internationally).

The group has stars: A prominent group member has been the second most productive psychology researcher in the world and is cited as the most productive European Psychologist from the 1990s to the present; the second most productive psychologist in the world, 1985-2005, and listed among the top 200 psychologists of all time in 2015.

4.3.4 Networking

The group members are very well connected both in terms of national and international research collaborations, as well as with corporate partners. Examples of international research collaborations are provided, as well as a list of international universities with which members of the group collaborate, and national research collaborations. Members of the group are popular collaborators among corporate, public and non-profit organisations nationally and internationally.

The group is more a sum of individual members and the new structure should enable them to develop their reputation as a group.

4.3.5 Interplay between research and education

The group is among the Norwegian Business School's most productive researchers, but also among the most active teachers, teaching at all academic levels from bachelors to PhD, with excellent teachers and excellent student evaluations. The courses are attractive, with 400 to 600 applicants to the MSc programme in Leadership and Organisational Psychology every year. Last year, they had 130 applicants from all over the world to three positions as PhD students. The group and the department of Leadership and Organisational Behaviour have their own PhD programme and typically employ 4-6 new candidates every other year.

4.3.6 Societal relevance and impact

The group has several projects with societal and real organisational implications. The group cooperates with organisations and disseminates knowledge to practitioners by (a) holding invited professional talks (several of the group members do this several times a month), (b) writing in the popular press and newspapers (several of the group members are regular columnists in printed media such as Dagens Næringsliv (the largest business newspaper in Norway) and Kapital (the largest business magazine in Norway), and (c) through international press coverage (research by two of the group members was recently covered in the New York Times, research by two other group members was also recently widely covered, including in The Independent and in Metro, and research by two other members was covered in Psychology Today).

4.3.7 Overall assessment and feedback

So far, the group has been more a collection of individuals. The new structure should enable the group to create a brand and a reputation as a group.

Excellent list publications, good research, linked to societal issues and good teaching.

Assessment of research group: 5 - excellent

5 Hedmark University of Applied Sciences, Faculty of Business Administration

Hedmark University of Applied Science, Faculty of Business Administration							
Units included in the evaluation of economic-administrative research	- Faculty of Business Administration (Dept. of Organizational and administration studies and Dept. of economic studies as of 31.12.2016)			Listed researchers	24		
				Listed research groups	0		
				No. of researchers in listed research groups	0		
Other units of the faculty (institution)	Training, recruitment and academic positions						
		2014	2015	2016			
	No. of PhD graduated at the institution per year						
	Male/Female	0/0	0/0	0/0			
	R&D expenditures and sources of funding (1000 NOK)						
		2014	2015	2016			
Funding of the institution				PhD positions	1/1	0/0	1/0
Total expenditures	12 868	14 355	18 845	Post.doc positions	-/-	-/-	-/-
Types of funding				Permanent positions	2/2	3/2	11/29
Core funding from the RCN	10 984	12 981	16 525	Education			
External funding, RCN	150	135	100	Study programmes BA level Accountancy, Estate Agency, Business Administration and Economics, Management and Organisation Development, Music Business – Management, Music Business – Production, Crisis Management, Service Management and Marketing			
External funding EU	721	34	621	Study programmes MA level Public Administration, Business Administration			
External funding, other sources	1 013	1 205	1 598	Other Management in Health and Care Services, Security Management			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

5.1 Economic-Adm. research at the institutional level

5.1.1 Organisation, leadership and strategy

On 1 January, 2017 Hedmark University of Applied Sciences (HUAS) and Lillehammer University College (LUC) merged to become Inland Norway University of Applied Sciences (INN). However, the current assessment concerns the Faculty of Business Administration (hereafter FBA) at HUAS.

FBA is governed by a dean and two vice-deans, one for education and one for research. The faculty has two departments, but no information is provided about their governance structure. However, in the short term, FBA's organisation and activities can be affected by the merger with LUC. Representatives of INN reported in interviews that there is a new faculty called Inland School of Business and Social Sciences.

The goal of the merger is for the university of applied sciences to actively engage in enhancing local and regional competence, and contribute to a more knowledge-based professional and community life. Another goal of the merger is to achieve university status, where one of the requirements is the development of four PhD programmes.

Another of FBA's goals is to increase the research funding level: 'To earn money on research' as it is stated. An interesting strategy for increasing research funding is presented, where both goals and incentives are in alignment.

5.1.2 Institutional follow-up of previous evaluations

Not relevant.

5.1.3 Resources and infrastructure

The necessary infrastructure is in place with library and IT systems and support. The size of the library is impressive and it offers various courses in the use of research tools. The institution also supports open access publication. This should further improve following the merger with LUC.

5.1.4 Research environment

There is limited information about the research environment as such. There is some international cooperation, which has recently increased. Some cross-faculty cooperation is also mentioned in selected topic areas. However, cross-faculty cooperation is constrained by the relatively limited scientific breadth of the faculties.

There is little national cooperation with other researchers. External funding is promoted, but how FBA ensures its research quality is unclear.

There is no PhD programme, and at least four research areas are mentioned, which may be too many for such a small university, because the number of researchers per area will be very low.

5.1.5 Research personnel

HUAS has an active committee for diversity and equality (led by the rector) that advises HUAS on its equality and gender policy and follows up on its implementation.

It has signed the European Charter & Code for Researchers, but it has yet to be implemented.

Incentives schemes are actively used to promote research improvements and to secure the qualifications of the staff.

PhD students and researchers are encouraged to spend time at research institutions abroad to further their projects, professional networks and professional competence, but there is no explicit sabbatical policy.

Its recruitment policy is not described. Several positions will open up in 2017; but how they are to be filled is not described.

When relevant, gender perspectives are included in the research projects.

5.1.6 Research production and scientific quality

The institution has launched several initiatives to increase production and quality. They promote international cooperation, allocate more hours to the most productive researchers and participate to an increasing extent in externally funded projects.

The results of this have yet to be fully materialised. One concern could be that it will be difficult to secure quality by maintaining the necessary focus on a few research areas, because of having to cover more areas due to teaching and the possibility of succeeding in external funding.

The productivity level for HUAS is average for applied science institutions and has increased in recent years. There is a relatively high proportion of publications in book chapters and, on average, the Norwegian language is used more than English. This confirms the impression of the need to focus on and develop a few areas of scientific quality.

Assessment of scientific quality: 2 - fair

5.1.7 Interplay between research and education

The time allocation between teaching and research (and administration) follows the international standard for full and associated professors, while the time allocated to assistant researchers for research is quite low. This is untenable in an international context. Normally it is the other way around, because young researchers need relatively more time to develop their careers and to qualify for tenure. This time allocation is often found at university colleges however. The low administrative burden should translate to more research time for junior staff than is currently the case.

There are close links between master's education programmes and researchers. When doing their master's and bachelor's theses, students are invited to select a theme that is based on the research areas of the research group and researchers.

5.1.8 Societal relevance and impact

The research has some links to the national thematic priorities. The links to regional organisations and firms provides a good basis for the social relevance and impact of the research.

However, there is no explicit strategy for dissemination and knowledge exchange. Several activities are listed, but they are traditional, ad hoc and bottom-up.

5.1.9 Overall assessment

As described, the institution has many interesting ideas about research, quality and impact. Many of these ideas have not yet materialised and the new merged institution has a fair bit of work to do to implement a research strategy based on quality and societal relevance.

Some of the submitted publications indicate evidence of international collaborations.

5.1.10 Feedback

Overall, the research needs to be focused to secure quality and to demonstrate social relevance and impact. A strategy also needs to be implemented for externally funded projects, including what kind of external funding is targeted, to ensure a closer relationship between research areas and priorities.

Finally, the work load of junior staff needs to be rebalanced between teaching and research.

6 Institute of Transport Economics

Institute of Transport Economics							
Units included in the evaluation of economic-administrative research	- Dept. of Safety, Security and Environment			Listed researchers	16		
				Listed research groups	1		
				No. of researchers in listed research groups	23 (23 CVs)		
Other units of the institution	- Dept. of Economics and Logistics - Dept. of Mobility and Organisation			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	1/-	-/-	1/-
				Total per year	1	-	1
				No. of positions announced / No. of qualified applicants per year			
R&D expenditures and sources of funding (1000 NOK)							
	2014	2015	2016				
Funding of the institution				PhD positions	-/-	-/-	-/-
Total expenditures	120 215	119 088	125 027	Post.doc positions	-/-	-/-	-/-
Types of funding				Permanent positions	3/NA	4/39	3/51
Core funding from the RCN	18 266	18 761	19 146	Education			
External funding, RCN	25 570	27 516	42 415	Study programmes BA level			
External funding EU	6 174	8 191	2 268	-			
External funding, other sources	73 732	61 549	64 493	Study programmes MA level			
				-			
				Other			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

6.1 Economic-Adm. research at the institutional level

The Institute of Transport Economics (TØI) was set up in 1964. In 1986, the institute became a private, independent research foundation. The Institute receives its annual base funding from the Research Council of Norway. The research conducted at the institute is highly interdisciplinary. It employs about 80 researchers who work on twelve research themes, which are in turn organised in three main research departments, each of which includes staff from several different disciplinary backgrounds. The Institute of Transport Economics engages in contract and academic research as well as contributing to teaching activities on relevant topics.

6.1.1 Organisation, leadership and strategy

The Institute of Transport Economics is a well-established and highly specialised research institute in a varied range of transport and related areas. The nature of most of TØI's research areas is multifaceted and, as such, normally call for contributions from different disciplines. This feature is also clearly evident in the institute's organisation. Overall, the structure of the institute and the composition of staff backgrounds and their place in the organisation appear well-suited to the nature of the institute's research activities.

The total number of staff is about 100, making the institute a mid-sized research organisation. The researchers have academic backgrounds from several relevant disciplines and they are distributed fairly evenly across the three main constituent departments. The largest group of researchers among the staff come from the economics discipline. This group is distributed unevenly among the departments, with the majority of them in the Department of Economics and Logistics, reflecting this department's specialisation.

6.1.2 Institutional follow-up of previous evaluations

Not relevant for this panel.

6.1.3 Resources and infrastructure

Assessing the resources and infrastructure of an institution is generally difficult. However, the institute has healthy access to external funding, which can indicate that their research direction has applied socio-economic relevance. TØI appears to have access to funding from a relatively diversified set of sources. No major shortcomings are reported or evident in the submission in terms of the institute's ability to provide infrastructure.

6.1.4 Research environment

The research environment is conducive to the development and implementation of research ideas and the implementation of projects. The close interaction between the research staff and academic institutions on students' research training and on teaching helps to bring TØI's research out into the academic environment. It also helps to establish better links with academia and potential candidates with a view to recruiting new researchers in the longer term.

As mentioned, the institute has strong external links and some staff research visits take place, but this appears to have resulted in limited collaborative research output. In particular, international output appears to be limited judging by the research papers submitted.

6.1.5 Research personnel

The research sabbatical policy is used to give research staff the opportunity to improve their academic qualifications. The research staff should also be able to take advantage of this arrangement to forge new links and develop collaborative and international research at the institute.

PhD training is mainly based on the cooperation with the University of Oslo (UiO), the Norwegian University of Life Sciences (NMBU) and Molde University College. This is understandable given the prior links between some researchers and UiO. However, such collaborations can also be sought with other institutions in Norway and abroad.

The submission emphasises that the gender perspective is recognised and reflected in many of the research areas. It is clearly positive that the gender aspect has been identified as also being relevant for some of the research, and the report states that 'during 2016 the institute employed 12 researchers of whom 10 were female'. It is however less clear from the submission how the gender aspect is internalised in the composition of the staff and the institute's hiring strategy.

6.1.6 Research production and scientific quality

The institute has a combination of theoretical, methodological and empirical research publications. The academic publications are of good quality. They tend to be mainly in field journals, but this is to be expected from a highly specialised research institution. Some of the ten publications submitted with the institutional self-assessment, show evidence of collaboration with other institutions.

The non-academic publications in the form of reports and analyses make very relevant socio-economic contributions with a clear potential for impact and policy implications. The importance of the dissemination strategy for communicating research to decision-makers and the public is recognised and rather well-thought out. It can also be used to better publicise the institution's research output internationally.

Assessment of scientific quality: 4 - very good

6.1.7 Interplay between research and education

It was not possible to assess the interplay between research and teaching from this submission. This topic has, however, been mentioned in the assessment of the Traffic Safety Group submission.

6.1.8 Societal relevance and impact

Transport research has been and remains an important area with significant socio-economic relevance and impact potential. Pressing transport related issues and the challenges facing research in these areas are evolving. TØI is well-placed and well-organised to respond to the changes and new emerging research issues.

Its interaction with decision-makers and contributions to public policy documents and policies, as well as outreach to the public are important in this respect. TØI also appears to attach importance to and provide resources for its communication with the public and society, which is very beneficial to users and stakeholders, but also to profiling the institute.

6.1.9 Overall assessment

TØI is a longstanding and specialised research organisation. The institute has an expedient structure and management to meet the current and changing challenges in transport research. Its scientific publications are mainly focused on field journals, which is common among specialised research groups

and institutions. The institute is well-connected internationally but can develop this into more actual research collaboration.

6.1.10 Feedback

The institute needs to have a clear idea of the role and long-term implications of its consulting and contract research activities for the desired research profile and for the overall image of the institute.

The institute can assign more weight to developing international research collaborations. This will, in the long run, benefit the researchers, research publications, external image and personal development of PhD candidates.

Its links to the university sector are heavily based on its connections to the University of Oslo, which appears to have a structured focus on the transport sector. TØI may be able to seek alternative academic environments that have a more flexible disciplinary division such as the Norwegian School of Management (BI). Business schools are more likely to be interdisciplinary and to host specialised applied research centres and collaborations.

The institute can also more actively explore international sources of research funding. This will again be possible in the longer term by further developing international partnerships and collaborations.

6.2 Research group: Traffic Safety

The origins of the Traffic Safety research group date back to the increase in traffic accidents in Norway in the post-war period. The group is part of the Department of Safety, Security and Environment, which is one of the three constituent departments at TØI. The group's research areas have been adapted over time to respond to the changing circumstances and traffic safety issues and priorities.

The group's research area is highly specialised. The group itself and the nature of its research is multidisciplinary. The group consists of 20 researchers, who are in turn organised in three subgroups. The group is involved in applied research as well as making contributions to forming and developing safety guidelines and documents for policymaking purposes. The group's research activities can therefore be viewed as generally having rather high societal relevance and impact potential.

6.2.1 Organisation, leadership and strategies

The research group and its three subgroups constitute an important component of the institution under which they work. Each of the researchers can belong to two of the three subgroups, which are in turn led by a chief research officer for a five-year period (evaluation after three years). Given the total number of researchers in the group (20), this structure appears both sound and flexible, while the group and its subgroups work within TØI's overall strategy as specified in the Strategic Institute Programme.

The group refers to TØI in the submission as the 'host institution' that provides financial support to the group. This presumably signals a degree of management and financial autonomy for the group. The financial support from the institution appears to fund the group's basic and infrastructure needs.

The group receives considerable funding from external sources. Income from contract research is very important to the group. This includes NOK 9 million from the RCN, which amounted to approximately 40% of total contract research in 2016. The sources of contract research seem to be predominantly public bodies. However, this reliance on a few public sources of funding can potentially expose the group to overall cutbacks in government spending in future.

The publication strategy is focused on recognised field journals. This is to be expected of a highly specialised group that aims to be noticed and recognised internationally among its peers. Several of the 23 publications submitted in the form of journal articles, TØI reports and other publications show evidence of international collaboration with external partners. Links to Swedish institutions appear to dominate, while two papers indicate collaboration with the UK and Chile. At least three publications show evidence of collaboration with the University of Oslo.

6.2.2 Research personnel

The group's recruitment and training strategy appears somewhat less formal than the rest of the organisation of the group and TØI as a whole. Supervising students is important for developing research opportunities and links with academic institutions, and some researchers have been recruited on the basis of their own initiative by submitting applications and proposals. A drawback of such a strategy is that knowledge of the research opportunities provided the group, among talented potential researchers, will not be widely known among the potential recruits and membership of the group will seem closed. However, vacancies for permanent positions are also openly advertised as part of the recruitment strategy.

The group also allows existing researchers to increase their competence by entering PhD programmes. However, in the longer run, permanent staff should be expected to already hold a PhD at the time of their appointment.

The group does not include any postdoc researchers. Postdocs are generally very motivated and productive in terms of research output and providing funding assistance. This is a shortcoming compared with traditional academic departments that provide career opportunities for early career researchers through postdoc arrangements. Although academic career advancements in the group's research area may be limited, the researchers may be able to develop opportunities with their collaborating institutions and universities. As postdoctoral posts may only be used by institutions entitled to award a doctorate, TØI is not in a position to have postdoc researchers.

6.2.3 Research production and scientific quality

The group has submitted a total of 23 publications in the form of journal articles, TØI reports and other outputs. The interdisciplinary composition of the research group is also reflected in the varied range of approaches adopted in the research outputs.

Some of the publications show collaborative work with UiO. About five publications show evidence of international collaboration, three of which were with Sweden and two with the UK and Chile. A number of the publications are single-authored. More collaborative work would increase the productivity of the group. The journal articles appear to be focused on a selected number of relevant field journals. The overall quality of the research presented is very good and the publication outlets appear to be suitable for the purpose.

6.2.4 Networking

There are good indications that the group is well networked within its research and professional environments. This also needs to be translated into collaborative research and other concrete outputs. The publication outputs do not reflect the networking effort and seem to be somewhat limited to a few collaborators. The networks can potentially lead to more collaboration and in turn help secure international funding, which will diversify funding sources. However, the group participates in a number of EU projects with partners from all over Europe.

6.2.5 Interplay between research and education

Several members of the group have a good level of teaching activities at undergraduate, master's, and PhD levels, although these efforts seem to focus more on higher degree levels. The teaching activities are not limited to Norwegian institutions, and some teaching takes place in Denmark and Sweden. Overall, the group exhibits a very good level of teaching engagement. This must also be seen in light of the highly specialised nature of their research, which might limit the scope of teaching potential.

6.2.6 Societal relevance and impact

The traffic safety research area clearly has a high degree of potential for societal relevance. This is also reflected in the group's ability to secure funding from the Research Council of Norway, as well as obtaining external funding and contract research from other public bodies. The five submitted impact case studies cover a diverse range of traffic safety areas. The cases of Speedcam and Shareroad have more physical safety effects, while the Handbook, White Paper 40 and Life Value cases are of more policy relevance. The overall assessment of the cases presented is that collectively they represent high socio-economic value in relation to their cost.

6.2.7 Overall assessment

Overall, the group produces good quality research output and other research with societal relevance and impact. It is important for the group to revisit the balance between academic research and contract research. Contract research clearly enables the group to be larger than it otherwise would have been. However, the long-term implications of this for the external image of the group in academia, the career progression of staff and the inevitable influence of the group's priorities and even its culture need to be considered. This is clearly a fairly delicate balancing act to which there should be an informed approach.

Assessment of research group: 4 - very good

6.2.8 Feedback

The group's funding base is currently very reliant on public sector sources. The group will benefit from a deliberate diversification of its funding sources, somewhat away from public sources. The current funding structure, while effective, generates a considerable amount of contract research. The group needs to carefully consider the pros and cons of this structure. For example, the extent to which the quality of the group's research publications and its research profile may be affected by the current focus on contract research and funding structure. More focus on developing international collaborations can be a useful way of developing a more diverse funding and research output base. TØI's positive international reputation can be helpful to this end. The social relevance of the group's research area provides a good base for generating more impact-oriented and socially beneficial research. The strong teaching-research link presented is important and should be maintained.

7 IRIS International Research Institute of Stavanger

IRIS International Research institute of Stavanger							
Units included in the evaluation of economic-administrative research	IRIS Social Sciences research activities are organized through three research groups: (1) Working life and safety, (2) Welfare, politics and policy and (3) Business development and innovation			Listed researchers	13		
				Listed research groups	0		
				No. of researchers in listed research groups	0		
Other units of the institution	Training, recruitment and academic positions						
		2014	2015	2016			
	No. of PhD graduated at the institution per year						
	Male/Female	-/-	-/-	-/-			
	Total per year	-	-	-			
R&D expenditures and sources of funding (1000 NOK)							
	2014	2015	2016	No. of positions announced / No. of qualified applicants per year			
Funding of the institution				PhD positions	-/-	-/-	-/-
Total expenditures	49 355	44 611	40 052	Post.doc positions	-/-	-/-	-/-
Types of funding				Permanent positions	2/13	0/0	2/15
Core funding from the RCN	6 290	6 504	6 787	Education			
External funding, RCN	17 468	19 843	14 865	Study programmes BA level			
External funding EU	2 066	155	698	-			
External funding, other sources	23 056	17 569	19 658	Study programmes MA level			
				-			
				Other			
				We do not have a record of all applicant so the numbers are a best guess.			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

7.1 Economic-Adm. research at the institutional level

The International Research institute of Stavanger (IRIS) is a private polytechnic research institute that performs research and development of high scientific quality and relevance for users, by means of active dissemination and commercialisation of their research results.

Collaboration is organised through two research centres; Centre for Innovation Research (CIR) and Centre for Risk management and Societal Safety (SEROS). IRIS Social Sciences shares these centres with the University of Stavanger. It cooperates with the University of Stavanger in joint research centres, and with research colleagues in other universities and institutes nationally and internationally.

7.1.1 Organisation, leadership and strategy

A senior vice president and three research directors constitute the management group of IRIS Social Sciences. Research activities are organised through three research groups: (1) Working life and safety, (2) Welfare, politics and policy and (3) Business development and innovation. A senior vice president and three research directors constitute the management group of IRIS Social Sciences. The research directors have overall responsibility for initiating project applications, setting up project teams, scientific achievements and economic performance in their research group. Four researchers hold the position 'Head of research' and their responsibility is to develop a portfolio of research projects within their field of research.

With only 15% RCN core funding, IRIS depends on external funding. As research is the only and core activity of IRIS, its collaboration with other institutions is therefore crucial and the merger may be a good solution. The danger is that IRIS may lose researchers to the other institutions. Branding would be very important.

7.1.2 Institutional follow-up of previous evaluations

Following recommendations from the RCN in 2015, IRIS has been seeking to merge with other social science research institutes to secure growth and critical mass. In 2016, an assessment of a merger between IRIS Social Sciences and Agder Research concluded positively. However, before implementation could start, it was invited to join a larger merger between Uni Research, CMR and Agder Research. This process is still ongoing.

7.1.3 Resources and infrastructure

The research is heavily dependent on project-based external funding. IRIS Social Sciences does not have any specific research infrastructure beyond empirical data from past research projects. IRIS researchers have access to library services at UiS.

7.1.4 Research environment

The overall objective of IRIS Social Sciences is, by means of research and development, to contribute enhanced knowledge to promote sustainable, healthy and productive development within society.

Researchers at IRIS Social Sciences establish contacts with both research colleagues, clients and end-users through conferences, seminars and networks. Participation at international academic conferences is prioritised. They collaborate with non-academic partners, clients and end-users for the joint purpose of project development and dissemination.

7.1.5 Research personnel

In 2016, there were between 35 and 40 researchers in IRIS Social Sciences, two thirds of them with doctorates. IRIS's policy for education in social science research is based on 'on-the-job training', i.e.

supervision from senior researchers and research directors and internal and external courses (project management, scientific writing and scientific methods). Academic positions such as researchers, senior researchers and heads of research do not have any administrative tasks or teaching duties. Participation at international academic conferences is prioritised. IRIS collaborates with non-academic partners, clients and end-users for the joint purpose of project development and dissemination.

IRIS is a private company (Ltd) with permanent positions only. Despite its growth ambitions, IRIS Social Sciences has reduced its number of employees. The main reason is the need for qualified researchers at the University of Stavanger, and IRIS is losing senior personnel to the University of Stavanger.

Today, IRIS Social Sciences has a research staff of approximately 50% men and 50% women. Both genders are represented in the positions as research directors, heads of research and senior researchers and researchers.

7.1.6 Research production and scientific quality

The most important research activities are in Economic-Administrative research, which is closely linked to RCN projects. The scientific contributions are both at theoretical and empirical level. The contributions revolve around different types of innovation (17 publications listed), migration (4 publications listed) and social and cultural inequalities.

IRIS faces increased competition for research projects, and a lack of interesting research projects. It prioritises academic publications, presenting papers at scientific conferences, but many clients would need reports. The publication rate is low, but of high quality. IRIS does not have any specific research infrastructure beyond empirical data from past research projects.

IRIS mostly works with RCN projects and client-based projects, and the funding from EU projects is low. Publications show a lack of international collaboration.

Assessment of scientific quality: 3 - good

7.1.7 Interplay between research and education

IRIS's policy for education in social science research is at large based on 'on-the-job training', i.e. supervision from senior researchers and research directors and internal and external courses (project management, scientific writing and scientific methods). PhD students are typically recruited into RCN projects and supervised by one of the senior researchers or a head of research. Young researchers are encouraged to obtain doctoral degrees. Academic positions such as researchers, senior researchers and heads of research do not involve administrative tasks or teaching duties. Collaboration with universities may increase the link between research and education, as the university researchers could use relevant research. Research for private clients could be used for case studies, enhancing the reputation of IRIS as well as that of the private organisations.

7.1.8 Societal relevance and impact

The scientific contributions are both at a theoretical and an empirical level. In general, the research is carried out in cooperation with businesses, trade unions or public bodies. The most comprehensive scientific contributions from the panel are in (1) the research field of innovation. Other research fields in which there are scientific contributions from members of the panel are (2) Migration and (3) Social and cultural inequalities.

The most important research activities are within political science and are closely linked to RCN projects. Each research project has its own dissemination strategy, depending on the client, the project

characteristics and the funding. Op-eds and oral presentations for users of the research are also prioritised.

The group submitted two impact cases and both of them have great societal impact in Norway.

IRIS Impact case 1: Site-specific scenarios

The impacts of the site-specific scenarios are mostly about agenda setting for the regional debate on what measures must be taken to secure a sustainable future. The scenarios have addressed business leaders, public bodies and politicians and have focused on their responsibilities.

IRIS Social Sciences has provided several site-specific scenarios. The first 'Rogaland perspektivanalyse' was presented in 2000. In 2006, 'Scenarios 2020' for the city regions Bergen, Haugesund, Stavanger and Kristiansand were presented and, in 2012, this scenario was followed up by 'Scenarios 2029'.

The first scenarios were developed when the oil price was USD 10 per barrel and there were increasing cutbacks and unemployment in Rogaland county. The presentation gathered an audience of 200 politicians and business leaders. The scenarios included a programme suggesting what type of measures needed to be implemented in the situation and this programme was implemented by the politicians. One of the measures was to establish an inter-municipal company for regional development.

Scenario 2029 for the same city regions focused on the need for change due to the climate challenges and the need for a broader industrial basis.

All scenarios are multi-media presentations and they were launched on selected sites for important representatives of the private and public sectors. The scenarios have created an agenda for regional political debate on many occasions.

This very good case has been widely published in Norway.

Impact case 2: Industry and economic analyses

The impact of the research in this area is related to the increased knowledge and in-depth understanding Norwegian decision-makers have gained about business cycles, industry structure, competence and regional development.

Several reports have been published, such as central indicators for economic development in Norway, employment and industry structure in the petroleum industry, wage levels and competence for 25,000 employees, industry structure in Rogaland county, and growth in small and medium-sized Norwegian City Regions. The reports have helped decision-makers formulate business or educational policies.

Both impact cases are in IRIS's core business, and have great societal impact in Norway.

7.1.9 Overall assessment

As research is its only activity, IRIS Social Sciences has a highly-qualified group of researchers, but is facing several challenges. A lack of interesting projects and competition for all projects are the main issues. Due to the lack of growth, IRIS is losing researchers to its partner, the University of Stavanger.

As external funding is essential, IRIS needs to position itself as a 'centre of excellence' in research. Branding needs to be addressed nationally and internationally. Collaboration with other research centres and the university on common research projects may help to attract national as well as international research projects (such as EU projects). Instead of losing researchers to the university, IRIS could look for joint research opportunities.

IRIS should strive to be more international and find international projects that would improve collaboration at an international level and might help it to retain researchers.

7.1.10 Feedback

The international dimension is not obvious, as IRIS works mostly with RCN projects, and with and for local institutions. Looking for international projects and clients would allow IRIS to grow and position itself in the market, as private funding is essential. It would also help it to retain senior researchers, who would then be active at an international level.

8 Lillehammer University College

Lillehammer University College					
Units included in the evaluation of economic-administrative research	- Dept. of Economics and Organizational Studies			Listed researchers	12
				Listed research groups	1
	- Dept. of Education and Social Work			No. of researchers in listed research groups	6
Other units of the faculty (institution)	Training, recruitment and academic positions				
		2014	2015	2016	
	No. of PhD graduated at the institution per year				
	Male/Female	0/0	0/0	0/0	
	Total per year	0	0	0	
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year	
	2014	2015	2016		
Funding of the institution				PhD positions	-/- 8/57 6/73
Total expenditures	30 049	34 172	37 406	Post.doc positions	-/- 0/0 1/11
Types of funding				Permanent positions	-/- 1/8 6/41
Core funding from the RCN	2 736	2 712	2 792	Education	
External funding, RCN	150	135	100	Study programmes BA level - Økonomi, ledelse og innovasjon - Marketing and management of tourism - Sports management	
External funding EU	-	-	-	Study programmes MA level - Public Administration (MPA) - Innovation	
External funding, other sources	2 144	7 857	7 866	Other Position numbers refers to employment at: Faculty of Education and Social Work, Faculty of Economics and Organizational Studies Faculty of Social Science	

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

8.1 Economic-Adm. research at the institutional level

8.1.1 Organisation, leadership and strategy

It is stated in the self-assessment that Economic-Administrative research is addressed through interdisciplinary topics. The university college's Faculty of Economics and Organisational Studies has the highest number of students, but surprisingly is not engaged in explicit research in the Economic-Administrative area. However, energy economics is identified as an area of application, which might be an interdisciplinary topic, but the contributions are clearly within the Economic-Administrative research area. There seems to be some confusion about research being identified as interdisciplinary or field/applied research.

The university college has a traditional structure, however, the size of each faculty is generally relatively small. There is a strategy encouraging the external funding of research. However, a dean has not been appointed for research, only a vice-rector with a focus on research at rector level. Lillehammer University College has for some years been working on a merger with other university colleges, and in January 2017, Lillehammer was merging with Hedmark University. The main issue for a small faculty (15 individuals are listed) is that it has to teach a relatively broad range of topics. Hence, it can be difficult to create the necessary research focus, and a look at the area of publications over the past three years reflects this, with very diverse fields/areas of publication ranging from energy economics, finance and tourism economics and marketing to human resource management.

8.1.2 Institutional follow-up of previous evaluations

Lillehammer University College has not been part of the previous assessments by the RCN.

8.1.3 Resources and infrastructure

The university college has recently grown with respect to social science, media profile and sport, i.e. there is no specific research strategy for the Economic-Administrative area. And from the submitted material, it is not possible to assess the exact allocation of resources to Economic-Administrative research. The panel is only given accounts data for three faculties in total.

The university college has a strategy to increase external research funding, and it is indicated that several applications will be submitted to the EU in 2017-2018. From the budget sheet, it can be seen that the amount of external funding is substantial, around 30% of the budget, illustrating success in these activities.

8.1.4 Research environment

The submission recognises the importance of external and international collaborations for PhD and staff development. However, the research environment is not described in further detail.

8.1.5 Research personnel

The university's recruitment activity is driven by the general requirements. There is no recruitment strategy in the Economic-Administrative area. It is stated that the recruitment of PhDs is a priority in energy economics. It is not possible, however, to determine whether this has been successful.

8.1.6 Research production and scientific quality

Around 14 researchers have been identified (DAMVAD) of which two are non-publishing. The average annual level of publication appears to be about 12 articles/chapters per year, which might be considered below what could be expected of such a group of researchers. Compared to other

institutions in Norway, the performance in terms of publication points is also below the average. There is also a lack of PhD students in the area.

Little detail is provided to support the claims about the scientific quality of the institution. There is one theme, namely energy economics and policy, where researchers have managed to publish in the best field journals. This work as it stands is acceptable and approaching international standard.

Seven publications are submitted by three researchers; six of these are within energy economics and policy and one is on forest planning (ten years old) and is not very representative of the current research output. These publications confirm that the work is of international standard.

Assessment of scientific quality: 2 - fair

8.1.7 Interplay between research and education

There appears to be scope for Economic-Administrative research to be incorporated more extensively into teaching. This is mainly an issue of workload, but also of how to match specialised areas of research with more general education.

8.1.8 Societal relevance and impact

There is insufficient information to make a judgement on this issue. It is stated that there are expectations of knowledge exchange. However, no policy and strategy are reported in the submission. No impact case was submitted.

8.1.9 Overall assessment

The Economic-Administrative research is quite diverse with, in reality, one focus area (energy) that has not been part of the overall strategy of Lillehammer University College in recent years. The university college has grown in other areas, e.g. media and sports. The main function of the Faculty of Economics and Organisational Studies seems to be to deliver teaching input to various study programmes.

8.1.10 Feedback

As a small faculty, the research needs to focus on two or a maximum of three sub-disciplines of economics and business administration. The interdisciplinary scope of the environment can be seen as an advantage, but only if there is a stronger commitment to develop the sub-disciplines of economics and business administration. There is a clear need for research leadership within the faculty.

8.2 Research Group: Energy and Natural Resources

The group has developed over the past seven years from being a research project group organised around a few research projects to a group of researchers (5-6 persons), which has developed its range and portfolio of research projects.

8.2.1 Organisation, leadership and strategies

No explicit strategy is stated for the group. One of the senior researchers is mentioned as the leader; but exactly what his role is remains unclear. The organisation and activities are very much related to what is required of running externally funded research projects. This means that contacts are established with both the scientific and commercial community. The quality of the group is secured by publishing, presentations and visits to well-respected international universities. The group's relevance is demonstrated by several of its projects being implemented by business and industry. Since the group is not large, its organisation makes sense, but a strategy is required in order to bring it to the next stage of development.

8.2.2 Research personnel

Recruitment to the group has mainly been at PhD and postdoc level, with graduates going on to be employed by the research group. Candidates are recruited via the group's network and job openings.

8.2.3 Research production and scientific quality

The group focuses on energy finance, energy economics and energy policy, and political economy research. This is very wide especially given the fact that the research group leader conducts significant research in other thematic areas (e.g. tourism). The group publishes both nationally and internationally, and the publications are co-authored to some extent. They mainly publish in journals. Overall productivity is at the lower end of the scale with publications in field journals. However, not many of these field journals are at BF12 level, which might explain the lack of publications in top journals. The group can aim to reach outside social sciences to increasing the interdisciplinarity of its research.

8.2.4 Networking

The report mentions a long list of universities and research institutions that the group cooperates with. It is not clear what kind of cooperation this is. Visits, joint workshops and co-authorships are mentioned in other sections of the self-assessment as networking activities. For a university college, this is more international and national scientific networking than often seen. The group also has networks with national industry. The group can develop a more coherent strategy to develop and utilise its international network for collaboration and research funding in the longer run. The international reputation and competence of Norwegian researchers in the areas of energy and resource should help to promote such a strategy.

8.2.5 Interplay between research and education

The group members teach mainly in standard economics courses and in a few courses within the field of the research group area. There is no indication of closer interaction between master's education programmes/students and the research group members.

8.2.6 Societal relevance and impact

The relevance of the group is demonstrated by collaborative research projects with the industry.

There is no impact case enclosed.

8.2.7 Overall assessment

The research group is developed around funded research projects and its activities and organisation reflect this. The group does not regularly hold research meetings and presentations. Its scientific qualifications are fine because the group members publish regularly in international field journals. The group has managed to develop collaborative research with the industry, thus demonstrating the relevance of the group.

Assessment of research group: 3 - good

8.2.8 Feedback

The next step for the group would be to implement common activities, such as research group meetings and presentations, and to develop a strategy for the research group. Taking the group to the next scientific level will require the development of a strategy that includes defining the research profile better, developing a qualification and recruitment policy, publication strategies and international external funding to mention a few areas of strategic interest.

9 Molde University College

Molde University College							
Units included in the evaluation of economic-administrative research	- MUC Faculty of Business Administration and Social Sciences (ØS), - MUC Faculty of Logistics (LOG) (main part)			Listed researchers	30		
				Listed research groups	2		
				No. of researchers in listed research groups	40 (41 CVs)		
Other units of the faculty (institution)	MUC Faculty of Health Science and Social Care (HS)			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	1/2	1/2	3/2
R&D expenditures and sources of funding (1000 NOK)				Total per year	3	3	5
	2014	2015	2016	No. of positions announced / No. of qualified applicants per year			
Funding of the institution				PhD positions	0/0	7/57	4/65
Total expenditures	47 806	47 219	52 479	Post.doc positions	0/0	1/4	1/1
Types of funding				Permanent positions	2/6	4/38	1/11
Core funding from the RCN	41 537	43 897	45 879	Education			
External funding, RCN	3 988	1 701	3 513	Study programmes BA level			
External funding EU	0	286	437	- Økonomi og administrasjon - Juss- og administrasjon - Logistikk og Supply Chain Management - Sport Management			
External funding, other sources	2 281	2 164	2 650	Study programmes MA level			
				- Økonomi og administrasjon - Logistics - Samfunnsendring, organisasjon og ledelse - Sport Management			
				Other			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

9.1 Economic-Adm. research at the institutional level

9.1.1 Organisation, leadership and strategy

At the time of this research evaluation, Molde University College (MUC) is involved in potentially fundamental processes of reorganisation. In autumn 2016, the board of MUC has come to the conclusion that – in the context of the reorganisation of the institutional environment of Norway's universities – it may be too challenging to remain independent and, hence, a merger with another university may be appropriate for future development. However, at the time of writing this research evaluation, the related internal and external processes did not appear to be completed.

With respect to the organisation of and leadership in the research area in particular, the rector of MUC has appointed a vice-rector for research (VFF) since 2014 to assist the rector in research affairs and who also chairs the research committee, which has an advisory function in research affairs. The members of the research committee are appointed according to their functions (e.g. deans). Moreover, there is an advisory committee for knowledge exchange. The relatively new function of the vice-rector for research at MUC was evaluated in 2016 with an overall positive outcome though some questions remained unanswered.

MUC holds (directly plus indirectly) the majority holding in Møreforsking Molde AS (MFM), a public limited company that undertakes commissioned research in close cooperation with MUC (e.g. involving researchers from MUC in joint project teams).

Within its overall specialisation in logistics, MUC aims to conduct research and knowledge dissemination of 'high international standard' and conducts research in cooperation 'with society and working life'. Given its specialisations, MUC seeks to be, at least, at the same level with respect to the quantity and quality of research as comparable institutions. To reach these goals, MUC has initiated several measures, such as enforcing research management, allocating priorities according to the fields of specialisation, using incentive mechanisms for research performance, re-allocating research time and supporting MFM. Overall, these goals, as well as the means of reaching them, appear suitable though some open issues remain. Moreover, given the focus on high international standards in publications, fostering international collaborations could be given higher strategic priority.

About 12% of expenditure is externally funded. However, this proportion may be put into perspective by the fact that much of the commissioned research is located at MFM. There is a remarkable increase in EU funds from NOK 0 in 2014 up to NOK 437,000 in 2016. In general, it appears relevant to further increase external funding, not only as a resource for research, but also as proof of research quality. In this respect, its relationship with MFM may be subject to further consideration (as already mentioned by MUC).

9.1.2 Institutional follow-up of previous evaluations

MUC's economic research activities were included in an RCN evaluation in 2007. Since this evaluation, there has been a successful and strong focus on further increasing publication quantity and quality and attracting more external funding. Moreover, the qualifications of the staff have been increased and a remarkable number of students have graduated from the – at that time very new – PhD programme in Logistics. In general, MUC seems to have received fruitful input from the previous evaluation, which have been successfully implemented.

9.1.3 Resources and infrastructure

According to the self-assessment, the key research infrastructure provided by MUC is the library including databases, which, however, appear to be of rather limited scope. With respect to external funding, MUC does not yet have a specialised research administration unit (the related tasks are currently carried out, for example, by the library). Given the demanding administrative requirements related to applying for EU funding, however, this could be a promising investment to disburden researchers, further increase motivation to apply for external funding and enhance professional project administration. This will also be important for the recruitment of future research-active staff.

9.1.4 Research environment

MUC appears to have some features that make it an interesting environment for research (e.g. small organisation with low communication barriers and institutionalised arrangements for conducting commissioned research). MUC appears to seek to exploit these characteristics and to further improve the research environment. MUC invites and employs professors from abroad in part-time positions.

9.1.5 Research personnel

MUC appears to have a high number of applicants to its open positions in research, and members of the permanent staff were recently recruited internationally. However, MUC also regards internal career paths from associate professorships to full professorships as motivating and helpful. However, the processes of recruitment and hiring with their potential interrelation with internal career paths are, thus far, not completely transparent. MUC has not signed the European Charter and Code, but supports the initiative as a member of UHR.

PhD students are mentored closely by the supervisors – ranging from tutoring in some cases to close integration into the staff's research activities in others. PhD students are also engaged in the research groups. Most PhD students have some teaching duties, and about 75% of their time is intended to be allocated to research. In the domain of logistics, a particular PhD programme has been successfully established that may provide inspiration for the other domains.

MUC encourages staff members to take research leave and employs an international network of cooperating institutions in this context. According to the guidelines for sabbaticals, a half-year or a full year can be supported every seven years. The gender balance is skewed differently across the different staff levels, with the lowest ratio of female staff at the level of full professors, which, however, seems to be a rather common phenomenon in academia. With respect to nationality, international applications predominate at PhD level, while MUC stresses that hiring from abroad has recently increased with respect to the level of permanent staff.

9.1.6 Research production and scientific quality

MUC employs some measures to further increase the quantity and quality of publications and to enhance applications for external funding. These measures seem mainly to be 'enabling' in nature, for example internal funding of promising research activities or the organisation of workshops for scientific writing. However, the 2020 strategy plan states that publishing shall be promoted through active use of incentive systems.

The topics in Economic-Administrative research have a strong focus on logistics, transportation and industrial engineering, which is in line with MUC's overall specialisation. Further research groups address other domains (e.g. 'Sport Management' or 'Social change, Organisation and Management').

Overall, the publication outlets used by researchers from MUC in the Economic-Administrative research area are of good, partially high scientific quality, and thus grant international visibility.

However, there seems to be some variation across the domains/research groups. A considerable body of publications is devoted to papers on 'traditional' logistics research (i.e. addressing methods employed / topics studied in operations research, operations management, information systems and game theory). These publications are published, in part, in very prestigious international journals.

The focus of the above-mentioned research activities is clearly very much in line with MUC's overall specialisation in logistics.

MUC has a considerable body of research that goes beyond the 'traditional' logistics domain. For example, one of MUC's best publications in the self-assessment is a piece of research on the valuation of regional aviation, where criteria of social efficiency are introduced. This research belongs to a larger body of research that addresses issues concerning the evaluation and benchmarking of transport systems and goes beyond 'traditional' financial considerations and, thus, contributes to a multifaceted perspective.

Assessment of scientific quality: 3 - good

9.1.7 Interplay between research and education

Associate and full professors are normally expected to dedicate 45% of their time to research, lecturers 20% and PhD researchers 75% – with deviations possible according to individual arrangements. Links between research and the study programme are institutionalised in the Logistics PhD programme. Apart from this, research links generally materialise at master's level, when students become involved in research projects relating to their theses.

Some research groups involve master's students directly in their research activities, resulting at times in joint publications and conference presentations. MUC reasonably stresses that involving students in commissioned research is rather challenging (due to tight time schedules among other things).

9.1.8 Societal relevance and impact

MUC has institutionalised the need for dissemination and knowledge exchange in some measures, including the special committee and the MFM which is devoted to commissioned research in particular. Together with MUC's focus on applied research, these measures in principle appear suitable and consistent with MUC's strategy.

MUC documents its dissemination/knowledge exchange activities through publications in journals oriented towards practitioners, edited books, working papers and workshops with practitioners.

The research activities in the Economic-Administrative area contribute to the Long-term plan for Research and Higher Education's thematic priorities 1 to 5. Moreover, according to the self-assessment, MUC's activities in this area reasonably contribute to reforms in health and social care (Samhandlingsreformen) as well as to the National Transport Plan. However, the legitimisation of 'interventions' by academia in relation to the economy, society etc. may also be subject to scientific reputation and levels of involvement (e.g. membership in committees with political decision-makers).

Overall, MUC's topical specialisation combined with its focus on more applied research reasonably makes it a valuable contributor to national initiatives/plans.

9.1.9 Overall assessment

Overall, with its focus on logistics and related issues, MUC shows a clear topical profile. The thematic focus also appears to have considerable potential for high societal impact. With respect to scientific

quality, MUC has made remarkable steps towards further cementing its position in various respects – from qualifications of staff, the PhD programme to the volume and quality of publications. It is very obvious that MUC has a clear mission to further improve scientific quality. However, at the same time, it appears that some means that have proven to provide good support have not yet been established leaving room for further improvements.

9.1.10 Feedback

The means suitable for further enhancing third-party funding (especially EU) mentioned by MUC, include establishing a specialised research administration unit that helps researchers to deal with the considerable administrative requirements related to third-party funds, especially in the EU framework. There may also be options for cooperative arrangements with the MFM administrative unit.

Thus far, MUC appears to refrain from carrying out regular performance evaluations in research – both at research group level and at individual level. If used in a constructive, future-oriented way, such evaluations may help to further develop MUC's research area. Moreover, the range of enabling means for research could be complemented by incentives based on awards and/or bonuses.

Given that PhD students may follow further career paths, it may be helpful to consider further PhD programmes, following the apparent success of the Logistics programme.

Furthermore, the relationship between MUC and MFM may be subject to some more general considerations as already suggested by MUC. There seems to be systematic tension between fruitful cooperation and, to a certain extent, the question of where external funds are institutionally located and, thus, are registered with respect to reputation-building.

However, the overall future perspective of a merger with another Norwegian university may lead to further and new development paths in research.

9.2 Research group: Social Change, Organisation and Management

The research group Social Change, Organisation and Management (SOL) dates back to 1986. The foci of research have changed over time, for example, from subjects of local government to sport management, initiated by the introduction of the respective teaching programmes. More recently, SOL has comprised three core topics: (a) Cluster, innovation and planning; (b) Public organisations and reform changes at local government level; (c) Sport management.

9.2.1 Organisation, leadership and strategies

The leading role in SOL is assigned to an associate professor at MUC. Her function is to coordinate research activities and serve as a link between SOL members and MUC's overall research authorities. The leadership form appears appropriate.

SOL addresses a rather broad range of topics; moreover, the group members employ rather different research approaches and methods. While this may naturally enhance mutual inspiration, it also poses challenges with respect to coherence and mutual learning. In this sense, SOL consequently understands itself as a 'forum'. There is a twofold strategic research output focus: scientific publications and related enabling means (e.g. workshops for scientific writing) and maintaining critical discussion by organising open lectures and guest lectures from inside and outside academia. These focal aspects correspond to MUC's overall research goals and strategy, and SOL seems to make use of

MUC's means of enhancing research performance (e.g. means of enabling higher research performance).

Members of SOL are integrated into research networks inside and outside MUC and have attracted external funding through these networks. In line with MUC's strategy regarding external funding, SOL increasingly applies for EU funds.

The group seems to have some problems with appropriate access to scientific literature – which, of course, is a question of financial resources – and, hence, the group members are looking for means of getting round these problems.

9.2.2 Research personnel

Research group membership is voluntary at MUC, and there does not seem to be a clear hiring and recruitment policy for the SOL group. PhD candidates belong to doctoral programmes inside and outside MUC, and are hired according to the particular criteria of these programmes.

PhD students are supervised by SOL members who integrate them into their research activities including, e.g. conference visits or workshops with practitioners. PhD students also participate in doctoral programmes and also become members of other research groups at MUC.

The composition of SOL's personnel with respect to gender appears well balanced, and there is a remarkably high diversity with respect to age and nationality including, though the majority are Norwegians, members from Greece, Germany, Iceland and Sweden.

9.2.3 Research production and scientific quality

There are remarkable differences in the research productivity of the permanent members of the group. As emphasised in the self-assessment, the overall performance substantially benefits from the more recently hired members who show good performances in terms of publications, particularly in international peer-reviewed journals. The contributions to the disciplines that make up the SOL group appear to result from, for example, using new methodological approaches in terms of interactive methods and interventional research in concrete public governmental contexts (e.g. municipalities).

With its topical range, the SOL group clearly employs interdisciplinary approaches, for example, in the field of sport management when organisational science perspectives are applied to institutional arrangements in sports (e.g. football clubs) or when questioning whether motivational instruments applied in sports can be used as means in organisations in general.

Reaching a conclusion on the research quality of the SOL group is rather challenging due to the heterogeneity of topics and of research output among group members in terms of the number of publications and outlets.

9.2.4 Networking

The SOL group is well integrated into various research networks, including other research groups within MUC, in academia in Norway or in other, predominantly European, academic institutions. Moreover, given SOL's focus on public issues, the group has strong networks with municipalities and regional public actors. SOL seems to employ these networks productively in connection with its research activities.

9.2.5 Interplay between research and education

Members of SOL are integrated into MUC's bachelor's as well as master's programmes. The courses are topically related to the three key thematic issues addressed in SOL's research, which is particularly obvious, for example, with respect to Sport Management.

9.2.6 Societal relevance and impact

SOL focuses on public management topics, particularly with respect to municipalities and regional actors, and on sport management. The research approaches employ direct interaction with practitioners and the integration of practice into research. Apart from this, knowledge dissemination is, for example, documented by workshops with practitioners or by popular publications. The topics addressed by SOL are important with respect to the economy, society etc. which is rather obvious, for example, with respect to research on municipalities and regional public actors, given that an effective and efficient public sector is an important factor for welfare.

The impact case 'New Modes of Collaboration in Maritime industries – Marco' describes a collaborative research project between SOL and the maritime industry financed by the RCN. Qualitative research methods such as in-depth interviews and questionnaires are applied. The research findings are subsequently regularly disseminated at workshops and seminars, and at conferences arranged by the industry. While the research has been conducted with the industry and the dissemination activities have been impressive, the impact of the research is not clear from the description.

In the case 'Managing and governing football – MANGOVF', researchers from SOL have contributed to the public debate on football as a business and an integrated part of the experience economy during the past 15 years. Beyond increasing common knowledge about the business of sport and football in Norway, education programmes for the industry were developed and completed. The long-term perspective of research and related impact is made clear by this case.

9.2.7 Overall assessment

SOL addresses a rather broad range of topics within Economic-Administrative research, extending from clustering, innovation and planning in the public sector to sport management. This range leads to some tension with respect to coherence as well as mutual inspiration and learning. Moreover, there seems to be some tension between focusing on publications in internationally reputable journals and intervening in concrete contexts – both of which, however, are in line with MUC's strategic focus. While the latter tension to some extent is a general challenge in research (e.g. the rigour vs. relevance debate), it may be too demanding given the above-mentioned topical diversity of the research group.

Assessment of research group: 2 - fair

9.2.8 Feedback

With respect to enhancing the scientific quality as well as the research output in a quantitative sense, SOL's research may benefit from narrowing down its topical diversity. Given the relatively scarce resources in relation to the diversity of the topics studied, it appears appropriate to focus on a few of these topics and to foster cooperation among the group members with respect to those particular topics.

9.3 Research group: Transport Research Group

The Transport Research Group (TRG) at Molde University College (MUC) is a longstanding research group that has been in existence since 1970. The focus of the group's research has over time developed

from being mainly on transport economics into broader-based multidisciplinary research on logistics. The group has close administrative, financial and research ties with the host institution MUC and its spin-off company Møreforskning Molde (MFM) which is, directly and indirectly, majority-owned by MUC.

The group conducts academic as well as contract research. It has also contributed to the development of the courses taught in Logistics at MUC at both graduate and postgraduate levels. The group currently has 21 part-time and full-time members of research who – through various arrangements – are affiliated to TRG, MUC and MFM.

9.3.1 Organisation, leadership and strategies

Specialisation in logistics is a key area of strategic focus for the further development of MUC. As such, TRG has an important position in helping to achieve this strategic goal for the host institution. The group is also well-supported by the host institution MUC. The organisation of the group and the affiliations of its members seem rather mixed from the outside. The group leader also holds a part-time position at MFM.

Many members of the research group are full-time employees of MUC (5) and MFM (5), as well as there being some part-time staff from MUC and other institutions. Just under half of the staff are at PhD or higher levels. In order to raise the academic credentials and profile of the group's research, the group should consider increasing the proportion of staff at PhD level and above over time.

The formal structure of the group is not clear from the submission, but the description implies it is likely to be simple and include group level meetings and subgroup meetings – the latter being based around the needs of specific projects. The current arrangement may be understood as TRG members who are essentially MUC staff also being assigned to some extent to (contract) MFM's research activities.

9.3.2 Research personnel

Several PhD candidates are affiliated to the group. The funding sources for the candidates vary. Some candidates are financially supported by MUC or by MFM, the latter mainly through contract research. The candidates have also had some possibility to spend some time abroad. The PhD students in TRG are tutored by group members. While MUC has a PhD programme in Logistics, the arrangements for the MFM PhD students are not clearly stated in the submission. It is however likely that these PhD students are part of the MUC PhD programme. TRG and MFM should be able to coordinate and collaborate on the training needs of their PhD candidates, if they are not already doing so.

The researchers can take advantage of the sabbatical opportunities offered under the MUC provisions. The group has collaborations in some countries in Europe, USA and Asia. The PhD candidates have the opportunity to be involved in TRG's international collaborations.

The group has no postdoc positions however. This represents a gap in the academic levels of the group. In most research-oriented academic settings, postdocs are the backbone of research output and even external funding for their host institutions.

The members named in the submission constitute an all-male list. This could also be an item for consideration in the strategic development of the group.

9.3.3 Research production and scientific quality

The group's research focus has clear social relevance and relates to infrastructure development, methods and models. Field journals are the main outlet for the group's publications, which is common among highly specialised research areas and groups.

Most of the group's commissioned research is policy-oriented and the users are selected public bodies in transport. While this reflects the social relevance of this research, it also means that less research income is derived from the private sector and other sources. This in turn implies that the group's financial strength is vulnerable in the event of cutbacks in public spending originating from a single source.

The quality of the eight research publications submitted varies somewhat. Several of the papers have been published in recognised field journals, while others are published in some lesser known outlets. The research papers submitted appear to be well diversified and some have an international focus. The authorship also reflects TRG's international contacts and publication collaborations. Some of the publications however stem from their authors' previous affiliations.

Both submitted case studies are focused on concrete issues. However, this is to be expected to some extent due to the significance of contract research for the group's activities and the public funding bodies being from Norway. They represent the research areas on methodological development and their application to actual cases.

9.3.4 Networking

The group has some international networks and collaborations. This has benefitted the staff and PhD candidates in the form of international visits and collaborations. This is also reflected in the affiliations of the co-authors in the publications, as well as the funding sources of the projects leading to the publications.

9.3.5 Interplay between research and education

The research group plays an active and central role in the development of transport and logistics studies and programmes as a key strategy of the host institution. The contributions towards accreditation of the MSc programmes are very positive in this context. The group also participates in the teaching activities for these programmes at all levels, amounting to a substantial 3,400 hours at BA, MSc and PhD levels.

9.3.6 Societal relevance and impact

The group's research areas are very socially and policy relevant. This is also reflected in the contract research undertaken by the group for the main public bodies involved in the transport sector. It is however less clear whether the group engages in substantial dissemination of the research results among a wider range of stakeholders and the public.

The impact case study submitted, TRAMOD, is based on a set of long-range transport models. These models are used in research publications as well as by public transport planners and decision-makers. The nature of the impact is clearly socio-economically beneficial. It is however, not certain from the description, whether it is the TRAMOD models that lead to the publications listed (though this appears to be the case), or that the publications lead to the presented impact (as is conventionally the case).

9.3.7 Overall assessment

The group needs a more formal strategic focus and direction for its research, staff development, networking and teaching. Although this may already exist, it is not apparent from the submission.

The group needs to focus on further improving its academic research output. Related to this, the group should develop strategies for including postdoc positions within its staff. This will be important for the future development of research in the group. Both MUC and MFM would need to contribute to this strategy.

The amount and role of contract research and its impact on the group's academic research output and activities needs to be reviewed as it is likely to involve a trade-off. While some contract research is beneficial for teaching, academic research and financial contributions, a clear strategy and awareness of this important matter will be useful.

The group also needs to consider strategies to diversify its funding sources. It is currently, as evident from the information submitted, very dependent on direct and indirect public spending.

Assessment of research group: 3 - good

9.3.8 Feedback

The group should assess the possibility of having research-active staff at all levels from junior to senior levels. At the same time, only about 50% of the current staff are at PhD level or higher. This proportion should be improved over time.

The role and amount of contract research in the group's research strategy needs to be constantly debated and assessed.

It is highly exposed to publicly funded research, and a more diverse funding strategy should be developed to reduce this exposure.

10 NHH Norwegian School of Economics

NHH Norwegian School of Economics							
Units included in the evaluation of economic-administrative research	- Dept. of Accounting, Auditing and Law - Dept. of Business and Management Science - Dept. of Finance - Dept. of Strategy and Management			Listed researchers	216		
				Listed research groups	7		
				No. of researchers in listed research groups	102+ (171 CVs)		
Other units of the institution	- Dept. of Economics - Dept. of Professional and Intercultural Communication			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	2/6	5/4	8/11
				Total per year	8	9	19
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year³⁰			
	2014	2015	2016				
Funding of the institution				PhD positions	15-16/ 35 (577)	15-16/ 29 (329)	15-16/ 46 (312)
Total expenditures	190 597	195 561	227 960	Post.doc positions	7/37 (212)	5/29 (261)	7/77 (273)
Types of funding				Permanent positions	2/6 (12)	9/4 (74)	5/8 (16)
Core funding from the RCN	160 738	161 481	188 064	Education			
External funding, RCN	17 664	18 882	19 357	Study programmes BA level - Economics and Business Administration			
External funding EU	0	1 907	3 359	Study programmes MA level - Economics and Business Administration - Accounting and Auditing (MRR)NHH Executive			
External funding, other sources	12 159	13 291	17 180	Other Position numbers: Shortlisted applicants in the above table with total number of applicants in brackets. Our evaluation committees short-lists the most competent and relevant applicants only.			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

³⁰ NHH has defined shortlisted applicants as qualified applicants. The number of formally qualified applicants is higher.

10.1 Economic-Adm. research at the institutional level

10.1.1 Organisation, leadership and strategy

At the time of the evaluation, the Norwegian School of Economics (NHH) is undergoing a change in its governing structure: Until July 2017, NHH had a dual leadership structure, with an (elected) rector who was also chairman of the board and responsible for all academic affairs, and a managing director responsible for day-to-day business and administration. However, from August 2017 not only will a new rector be in charge; moreover, the new rector will not be elected as before but appointed and the board will have an external chairman. Moreover, the leadership will be more unified, since the rector will then be responsible for both academic and administrative affairs. These changes – coinciding with the evaluation – may have considerable effects on government and leadership in NHH.

However, so far, the governing structure in the research area appears to be differentiated and slightly diffuse. According to the organisation chart, apart from the rector, responsible for academic affairs, there is a vice-rector of research and also the NHH Research Committee (FFF). This committee seems to have far-reaching competencies in the research area (e.g. coordination and monitoring research, supervising the PhD programme and implementing the research strategy).

In research, NHH aims to achieve high international visibility with expertise at the highest international level. NHH actively seeks to disseminate research-based knowledge. NHH has defined four strategic priority areas: Internationalisation, quality of studies, special areas of research expertise, corporate relations and partnerships.

With respect to research, NHH has established appropriate actions to address these strategic priority areas in order to reach the goals. In 2014 for example, strategic research initiatives related to three levels (international excellence, national areas of expertise and emerging fields) were established. NHH is engaged in various and prestigious national and international collaborations – not only with other universities but also with industry-focused research clusters.

These actions appear well suited to implementing NHH's strategy and goals; they match the goal to conduct relevant research at the highest international level and to disseminate research-based knowledge.

Regarding research funding, the majority of funding comes from the Norwegian Government, with the RCN dominating third-party funding (around 50%). International funding, including from the EU, makes up about 10% of external funding in 2016. From 2014 to 2016, there was an increase in EU funding from 0 to NOK 3,359,000. However, there seems to be some room for improvement with respect to EU funding, as already mentioned by NHH in the SWOT analysis. On the other hand, securing EU funding requires a research service unit specialising in project administration etc., because the administrative requirements relating to EU funds are substantial.

10.1.2 Institutional follow-up of previous evaluations

In 2006/2007, two NHH departments participated in the evaluation of economic research in Norway, and NHH's PhD programme was evaluated in 2011/2012 and in 2016. The overall assessments were 'excellent' and 'very good', respectively. However, heterogeneity in research productivity among NHH researchers and some recruitment problems were mentioned.

Based on these evaluations, NHH has implemented several actions, such as improvements to the PhD programme, intensified incentives for publishing in top journals and actions for (international) recruitment. These actions appear to be in line with the recommendations of the previous evaluations,

consistent with NHH's research strategy and a suitable means of further improving research performance. However, research productivity variety is still stated as a weakness in the SWOT analysis.

10.1.3 Resources and infrastructure

The resources and infrastructure provided for research are also subject to the workload induced by the number of studies and students. Given the number of staff members and the teaching workload, overall, these resources appear adequate for intense research purposes. Moreover, the immediate technical infrastructure required for Economic-Administrative research (e.g. experimental lab, databases) appears suitable. NHH seems to make a broad range of contributions in basic research, applied research as well as research dissemination, which benefit from these resources.

10.1.4 Research environment

NHH has described research collaboration as one of the enablers for further improving quality of research. Various actions and institutional arrangements are taken to foster collaborations among researchers at NHH, with other researchers (national and international) and with industry partners/clusters. Moreover, SNF's (Centre for Applied Research at NHH) interplay with NHH staff is an important precondition for bridging basic research and applied research. The aforementioned arrangements substantially contribute to a productive and fruitful environment for research.

10.1.5 Research personnel

Vacant positions are advertised internationally, and further actions are taken to ensure international hiring (e.g. visiting conferences). In 2016, a remarkable 31% of the staff members had an international background. The career path enables staff members to become full professors in NHH by following a path from assistant and associate professor.

NHH has yet to sign the European Charter and Code, but is considering doing so next year. NHH commits to an open, transparent and effective recruitment strategy that grants equal opportunities. Moreover, NHH seeks to achieve a balanced personnel composition, in relation to various aspects and, of course, including the gender balance. However, NHH addresses problems relating to hiring and retaining high-quality staff and, in particular, mentions the public funding scheme as a limiting factor in this respect.

In recent years, the procedure for selecting/hiring professors has been improved and, in particular, more autonomy has been granted to the departments in this respect. Performance evaluations and annual appraisal interviews have been introduced for all staff members.

The PhD programme focuses on providing deepened theoretical and methodological knowledge and emphasises the individualised nature of the PhD thesis. The majority of PhD students are employed as research scholars and, as such, are integrated into research groups involving close supervision and collaboration. However, the number of PhDs who graduate per year appears rather low in relation to the size of the staff.

NHH facilitates research leaves for the different groups of academic staff and, employs in this context an international network of cooperating institutions.

10.1.6 Research production and scientific quality

As well as establishing a strong research culture, NHH has successfully implemented various actions that aim to foster high-level research. They include periodical performance evaluations and incentives related to research performance (e.g. annual grants for outstanding publications and bonuses for attracting EU funding) as well as initiatives to foster international collaboration in research.

NHH's research topics that relate to the evaluation of Economic-Administrative research are organised via four departments: the Department of Accounting, Auditing and Law; the Department of Business and Management Science; the Department of Finance and the Department of Strategy and Management. The research issues addressed by these departments make up the very core of the economics and business administration domain. Moreover, partly interdisciplinary issues that go beyond the traditional lines between domains/disciplines are raised (e.g. aspects of ethics; natural resources value chains). Interdisciplinarity is achieved, for example, by collaborating and publishing with researchers from other disciplines (e.g. psychology).

Based on the ten most important publications named by NHH, the publication outlets are at the highest level of scientific quality and grant high international visibility. The papers are of outstanding quality throughout with a high degree of originality. However, it may be worth mentioning that – based on authorship – these ten papers do not appear to reflect the research of all the relevant departments, which may be subject to the variety of research productivity mentioned by NHH.

According to NHH's estimate, about 75% of scientific publications are intended for an international audience. Given NHH's strategic focus as well as its publication outlets and their quality, this seems reasonable.

Overall, the research production and scientific quality are at an excellent level and are thus in line with NHH's strategic aims.

Assessment of scientific quality: 5 - excellent

10.1.7 Interplay between research and education

The senior staff are expected to allocate about 40% of their time to teaching and the same ratio to research. More emphasis is put on research (75% of their time) for PhD students.

Overall, NHH is committed to research-based teaching and it actively seeks to integrate students into research – though, admittedly, some natural limits exist that are clearly addressed by NHH. At bachelor's level, students participate in experimental research, and at master's level, the students' theses are often related to the research groups' topics. This is institutionalised by regular meetings being held to inform students about potential thesis topics and by hiring master's students as junior researchers in the research groups. Moreover, several papers were co-authored with students.

10.1.8 Societal relevance and impact

NHH aims to disseminate research-based knowledge and to enhance public debate and, by doing so, also increase the national and international visibility of NHH.

NHH's activities in this respect are documented in different ways: Apart from scientific papers related to influential impact cases, these activities are documented in professional-oriented and public-oriented outlets (e.g. newspapers). Moreover, knowledge exchange is also performed by memberships of (senior) staff members in governmental expert committees. These activities, and the related documentation, appear to be performed in an excellent manner. Six impact cases were submitted to demonstrate the impact of research. In the 'FORESTRY' case, operation research methods have been used in the Swedish forest industry to reduce transport costs in the sector. This is an example of documented direct collaborative research with business to create value-added. In the 'Active Fund Management' case, researchers contributed scientific knowledge on fees in investment funds to a current lawsuit concerning investment management, and the researchers thus responded to a need

for knowledge in society. In the 'Competition in the grocery sector' case, the Norwegian competitive authorities applied the research output from NHH as the theoretical foundation for deciding a given case concerning a merger in the grocery sector. The researchers have also contributed through their dissemination in the media. The 'Active Fund Management' case describes research that has followed the development of an internal management system in a large oil company. 'Service design & design thinking in Telenor' is a similar case where researchers have followed a development in a firm and documented the process. In both cases, the research has been presented to the employees and the leaders. The impact case 'Price risk' presents research that is applied and used more or less as a standard in the financial sector. This case shows a linear and direct research impact, where research is published and then applied.

The research topics related to the field of Economic-Administrative research predominantly contribute to the thematic priorities '(3.) Public sector renewal, better and more effective welfare, health and care services' and '(5.) Innovative and adaptable industry' in the Norwegian Government's Long-term plan for research and higher education (LTP). However, the LTP's other priorities are also addressed, as illustrated by third-party funded projects. Given the thematic focus of the departments and the research groups and their partly very relevant focus (e.g. adaptive organisations) as well as the particular topics of the third-party funded projects, the contributions to the LTP appear excellent.

In sum, NHH substantially contributes to society and economy, through scientific research at the highest international level, providing results that are relevant to successful business and resource management and, thus, fostering welfare. Moreover, NHH takes an active role in integrating partners from industry and administration into its research initiatives and disseminates research in manifold ways. In sum, these contributions are at an excellent level.

10.1.9 Overall assessment

The Economic-Administrative research at NHH covers the core topics of the domain and provides new and partly interdisciplinary impulses for new research directions. The scientific contributions reach the highest international levels of scientific quality. Research topics are of societal relevance, several forms of integrating industry and administration into research are employed, and the results are disseminated, by different means, to decision-makers in government and industry and to a broader public.

10.1.10 Feedback

NHH's governmental structure is currently undergoing a change. In this context, it might be helpful to also clarify the responsibilities of the vice-rector of research and the NHH Research Committee (FFF).

NHH makes active use of incentives for outstanding research. However, to reduce the variety in research performance (as mentioned by NHH), in addition to incentives, it may be interesting to establish actions that place particular emphasis on further developing research competencies.

With respect to the PhD programme, it might be interesting to evaluate the number of graduations and, eventually, to rethink the rather individualised approach of the current programme in favour of an approach that is more structured around thematic topics.

With respect to third-party funding (especially from the EU), which is among the concerns mentioned by NHH, it may be interesting to think about expanding/establishing a specialised research administration unit to help researchers deal with the considerable administrative requirements related to EU funds.

10.2 Research group: Centre for Corporate Finance

Most of the members of the research group Centre for Corporate Finance (CCF) are members of the Department of Finance (DF) staff at NHH. The group consists of seven permanent members and two temporary members of academic staff, one assistant professor and six PhD students. All members of the group have a part-time affiliation with CCF (30% for permanent members of academic staff, 20% for PhD students, and 5-10% for temporary members of academic staff).

10.2.1 Organisation, leadership and strategies

The self-assessment report does not describe how the centre is organised and managed.

The group aims to be an inspiring academic environment that helps its members to publish in the best journals. However, the self-assessment does not list many activities that support this goal. The strategy is aligned with NHH's overall strategy emphasising research excellence. An important instrument for achieving research excellence is international collaboration. CCF has an exchange programme with Tuck School of Business (Dartmouth College, USA), hosts visiting scholars and organises a biannual conference where leading international scholars participate. Together with other research groups in Bergen, the group organises different events for practitioners. NHH provides the group with access to different databases.

The group relies on external funding for some of its activities, but no information on external funding was submitted.

10.2.2 Research personnel

DF appears to make decisions concerning hiring. Staff members and PhD students working on corporate finance are then invited to become members of the group. The CVs show that DF has been able to attract researchers with PhDs from top schools in Europe and in the US.

Many of the PhD students at CCF have spent time at a university abroad. This exposes them to a different research environment and helps them build an international network. All members of staff teach PhD courses at NHH.

The gender composition of the group is skewed. Among the permanent academic staff, two out of seven researchers are female. However, the proportion of female researchers is similar to the average for the panel. The gender composition is balanced among PhD students. In terms of educational background, the group is quite international, and four out of seven permanent members of staff have a PhD from a university abroad.

10.2.3 Research production and scientific quality

Overall, the research group is productive, and the quality of the research is very high. Among the articles listed in the CVs, 19 out of 26 articles are published in level 2 journals. They include five articles in top 3 journals in finance. Furthermore, interpreting these numbers, it should be noted that several members of the group are young scholars who have just started to publish. The high quality is also reflected in the submitted papers. Almost all papers are level 2 publications, and three of the papers are published in top 3 journals in finance. The group's strong international network is illustrated by the high proportion of articles written with international co-authors.

The members of CCF work on a number of core issues in corporate finance. However, the self-assessment does not point to an area where the work of CCF has had particular scientific impact. In any case, it may be premature to assess the scientific impact of the centre given that it has only existed for three years.

The members of the group do not seem to be involved in interdisciplinary research.

To sum up, this research group has a focused research agenda, high productivity, and publications of a very high average quality. The members publish regularly in the leading field journals, but also manage to publish in the top 3 journals in finance. The group is one of the leading groups in Scandinavia. Its ambition is to become a leading group in Europe, and CCF is well-positioned to achieve this in the years to come.

10.2.4 Networking

The group has a formal agreement that enables members of CCF to visit the Center for Corporate Governance at Tuck Business School, Dartmouth College. CCF also organises a biannual conference that attracts leading scholars in the field. Finally, members of CCF have strong networks and work with co-authors from top universities in Europe and the US.

10.2.5 Interplay between research and education

Members of CCF contribute to teaching programmes at all levels (bachelors to PhD) as well as in executive programmes.

10.2.6 Societal relevance and impact

The self-assessment report does not mention dissemination activities beyond the above-mentioned annual event for practitioners and academics.

The impact case concerns research performed by two CCF members estimating the cost of imposing board gender quotas in Norway. The research suggests that such quotas are perceived as a low-cost constraint by market participants. As Sweden was considering introducing similar quotas, CCF researchers participated in the public debate in Sweden and were invited to the Swedish Ministry of Employment to discuss their research. The Swedish Government proposed board gender quotas, and CCF commented on the proposal. The proposal was eventually rejected in parliament.

The activities described in the case go well beyond dissemination. The case illustrates how CCF researchers, through their interaction with policymakers, made the next step towards societal impact. The case would perhaps have been even stronger had there been evidence showing that CCF's research influenced the content of the proposal made by the Swedish Government.

10.2.7 Overall assessment

CCF is a productive group that delivers high-quality research. However, it is not clear from the self-assessment report whether this is a research group or a collection of individuals with common interests. CCF is one of the leading groups in corporate finance in Scandinavia. Its ambition is to become a leading group in Europe, and CCF is well-positioned to achieve this in the years to come.

Assessment of research group: 5 - excellent

10.2.8 Feedback

There seems to be room for organising activities that increase interaction among group members and the coherence of the group (brown bag seminars, off-sites, regular meetings to discuss matters of strategic importance etc.). Developing a strategy for external funding is also recommended.

10.3 Research group: Energy, Natural Resources and Environment Centre

The research group Energy, Natural Resources and Environment Centre (ENE) builds on a notable tradition of renewable resource economics and on subsequent energy and environmental economics research in Norway. The strength of the research output and the researchers means the group is well-placed to contribute to this research area in future. The establishment of the ENE master's and PhD programmes was an important factor in forming the centre around ten years ago.

The quality of the research output is generally of a high standard and several of the submitted publications are in top scientific journals. However, the orientation of the research outputs presented appear to be less policy-oriented than that suggested in the self-assessment, which is naturally reflected in the publication strategy chosen.

It is however less clear whether the group operates under a coherent strategy or is a mere combination of good researchers with their own research agenda.

10.3.1 Organisation, leadership and strategies

The submission has provided CVs for the centre members and affiliates. It appears that the centre members are members of their respective academic departments in NHH. The ENE Centre is formally one of the research centres of the Department of Business and Management Science.

However, the centre's scientific goals have not been clearly presented. The role of the centre leader and the division of responsibilities between the group leaders are not clear and might be defined in the context of an overall strategic direction for the centre.

The submission is unclear about the specifics of the centre's leadership and strategy. The centre comes across as a mere collection of good researchers with similar interests rather than a coherent research entity. It should be noted that this form of more informal and static organisation is not uncommon in academic institutions. An inspection of the centre's website did not disclose information that led to other observations and views.

While the master's and PhD programmes focus on energy and resource economics, the main part of the research projects are within marine resource economics and management indicating a mismatch between the programmes and profile description and the application area of the research.

10.3.2 Research personnel

The academic staff, research personnel and affiliates are generally well qualified. The PhD candidates supervised in the centre are well qualified and the numbers allow for a small vibrant community. The positions are advertised internationally, but no other formal recruitment activities take place.

The PhD cohort is rather international, which indicates that the centre's PhD strategy to operate at international level has been successful. The possibility for candidates to visit other institutions helps to improve their mobility and networking.

About 20% of the listed members are female and only one of those listed as other members is female. While there is evidence of a focus on training, mobility and gender balance in practice, the submission does not make it clear whether a formal strategy is in place for these areas.

10.3.3 Research production and scientific quality

The research samples presented are of high quality and are often published in well-regarded scientific journals. The research presented demonstrates good theoretical and methodological strength.

Some of the research samples presented show evidence of international collaboration. However, this could still be somewhat higher.

It was difficult to gauge the group's exact productivity as this information is not available at research group level. However, the information at department level indicates a publication strategy that is more focused towards quality (BF12 level) than quantity.

10.3.4 Networking

The centre appears to place value on networking for the benefit of PhD candidates and to advance the centre's research activities. The centre's international affiliates also reflect this.

Surprisingly, the group members are not involved in many projects initiated with the industry. The group members are not used as policy experts and do not serve as committee members. The area of application provides a good platform for such activities.

10.3.5 Interplay between research and education

The members of the centre contribute to teaching at all degree levels at NHH as well as in their own MSc programme. Teaching time is distributed fairly equally across education levels. The centre can easily provide specialist teaching in their given area of research expertise. Given the quality of the research undertaken by the staff, it would be useful to know the extent to which the research enriches the teaching.

10.3.6 Societal relevance and impact

The centre's research areas are very relevant for many social and policy areas. The centre is therefore very well placed to make significant socio-economically relevant impact. The case study presented is a good example of this potential. The centre therefore needs to consider whether the research output can be better balanced with more empirical research as these outputs tend to have a higher propensity for significant socio-economic impact.

10.3.7 Overall assessment

It is ten years since the establishment of the centre, which was largely motivated by the centre's master's and PhD programme. The centre could better structure and presents its research and teaching activities to help recruit researchers without prior familiarity with the centre. Activities such as seminars could, for example, be better presented. Some of these features may already exist, but this is not apparent in the submitted document.

The centre's research funding is predominantly from the Research Council of Norway. There is very limited funding from other Norwegian and international sources. This exposes the centre's future research to potential cutbacks in research budgets and an induced reorientation of research funds. Increased diversification of funding sources is therefore necessary.

However, the centre's research and training strategy could be further developed and explored to align them with those of NHH as a whole.

Assessment of research group: 4 - very good

10.3.8 Feedback

In a longer-term perspective, the group will have to focus more on energy economics and policy. The group will also need to develop a strategy that deals with the centre's organisation and leadership, including how it will diversify its funding strategy.

In the shorter term, the group can develop its centre activities even further.

10.4 Research group: Shipping and Logistics

The research group Shipping and Logistics was established in late 2014 by the NHH management and it is financed by internal funding. The group currently has three permanent staff (full professors) and seven temporary employees, where two are assistant professors (i.e. in career development positions). The staff come from two departments and combine empirical shipping market research at the Department of Economics and Operations Research with research in logistics at the Department of Business and Management Science.

10.4.1 Organisation, leadership and strategies

The group is rooted in the Department of Economics and Operations Research and one director has been appointed for the group. External projects and PhD projects are rooted and located in the group. There is no further explanation of the group's organisation and leadership.

The group has formulated three explicitly scientific goals and states in the evaluation that it contributes in various ways to the fulfilment of NHH's strategy. Actions for reaching the scientific goals are described. However, few actions are available or mentioned to demonstrate how the group will also fulfil the non-scientific goals set by NHH.

10.4.2 Research personnel

The group relies on and actively uses its international network when recruiting PhD students and postdocs. There is, as such, no explicit recruitment policy.

All PhD students are encouraged to spend a half-year to one year abroad and there is a well-functioning placement arrangement. The PhD students are linked to foreign researchers as well as industry partners when relevant. The group arranges PhD courses for their own students as well as other students.

The gender balance leaves room for improvement as only one group member is female. The international dimension of the group is growing as the younger members are mainly non-Norwegians.

10.4.3 Research production and scientific quality

The research profile focuses on two applications: mathematical modelling of logistics systems under uncertainty and empirical analysis of shipping markets. The group is relatively heterogeneous with respect to the applied theory and methods, which can limit the options for cooperation in the group, but, on the other hand, this provides good options for interdisciplinary research. The members of the group publish in highly-ranked field journals and in average general interest journals. These publications are evidence of international collaboration as they are often co-authored. The productivity is relatively high.

10.4.4 Networking

The section has an extended international network with other highly-ranked universities and it promotes research stays abroad. The researchers participate extensively in international conferences

and are involved in scientific committees. They have several editorial tasks. All their scientific network activities are extensive and seem to be of a high standard.

10.4.5 Interplay between research and education

The members of the group mainly teach at master's level – in total six courses plus one PhD course per year, which, at an overall level, is not an extensive burden. The teaching is within the group's specialisation.

There is room for more general courses to be developed in the research area – both thematic and methodological – to be offered at both bachelor's and master's level.

10.4.6 Societal relevance and impact

The research group has developed annual industry seminars where they disseminate their results. They indicate extensive cooperation with the sector. Knowledge exchange activities as such are not described in detail.

As a result of its close cooperation with the industry, the group has recently renewed a five-year endowed professorship funded by the industry.

The group delivers an unexpected, but interesting and very good, impact case on allocation of match days between teams in a tournament. A classic operation research problem, but thematically a little away from the normal application area of the group.

10.4.7 Overall assessment

The section has a clear profile and research agenda with respect to the application area. The group receives a good amount of funding from the industry. However, its theoretical and methodological approaches are somewhat diverse. The scientific level of the group is generally of a high standard. A clear formal management and leadership framework does not appear to be in place. As a group, they also have some gaps in their recruitment processes, and have little focus on gender issues.

Assessment of research group: 4 - very good

10.4.8 Feedback

The group could benefit from developing a more focused scientific profile and a clearer management structure.

10.5 Research group: Centre for Service Innovation

This sizeable Centre for Service Innovation (CSI) was established as a result of an RCN research grant in 2011, with sustainability guaranteed until 2019. The research undertaken by CSI explores service innovation under four coherent and interlinked research themes.

10.5.1 Organisation, leadership and strategies

The group has 12 senior members (with a varying rate of % FTE) and two PhD students. An extensive governance structure is in place, including a board of directors, consortium, management team, research directors and a scientific advisory board (including several well recognised international service science scholars). This is quite impressive.

Appropriate resources are in place to ensure the effective day-to-day management of the centre. The managing director has a clear leadership role, with responsibility for executing the centre's strategy

and its daily operations. These responsibilities are shared with the two members of the management team.

The group's desire to attract external funding to support it in the longer term is work in progress, though the five additional funding projects that have been set up suggest there are grounds for optimism. The likely contribution of the membership model in supporting funding is less obvious, with this funding route requiring further attention.

The preparedness of the RCN to continue funding the centre is indicative of the quality of its work. Overall, the profile presented indicates an internationally well-regarded research group, with a strong researcher profile that is carrying out interesting and important work with clear impact.

CSI's aspiration for international excellence is evident in its stated strategy, which provides a clear sense of the group's vision, objectives and of the outcomes that are sought to achieve them. These objectives seem appropriate for a centre of this type. They include: the need to publish at the highest level, the drive to build a strong international network of partners, attracting research funding to become financially sustainable beyond 2019, and the desire to carry out work that is impactful in a variety of ways.

10.5.2 Research personnel

Overall, the research group has good capacity to address its four priority research themes. Eleven members of academic staff are listed, most of whom spend between 20% and 35% of their time working in the centre. Most gained their PhDs from NHH, but four gained their PhDs overseas. The gender balance seems reasonable and there is a mix of age groups and experience within the centre. Several of the staff gained their PhDs overseas. There is also a good mix of affiliated researchers and PhD students from other academic and practitioner organisations. In addition, the group includes one postdoc researcher and two PhD students.

There are several cases of members of the group's PhD and postdoc community becoming permanent staff members. A rigorous approach is in place for selecting PhD students. The degree to which the group can afford to be selective is indicative of the reputation it is building.

A well-designed training programme is in place to support these students during their studies. The network of centre partners provides students with easy access for data collection, which can otherwise be a barrier. National and international mobility are designed into the programme. For example, students have the opportunity to study abroad for six months. Postdocs are also well supported, and seem to have good access to teaching and project opportunities that can both support the work of permanent staff and help the postdocs to develop their CVs.

The group collaborates with research partners (both academic and industry), but there is no report on activities related to the mobility of the researchers.

10.5.3 Research production and scientific quality

The group shows good scientific quality that is evidenced through its publications, including several papers in FT50 and ABS 3 and 4 ranked outlets. As would be expected given the different career stages, the level of publishing by individuals varies, as does the quality of the selected publications. However, some of the centre's staff publish in the best journals in their fields, often in collaboration with international co-authors. There is also an upward publishing trajectory as the group seeks ongoing elevation of its publishing profile to ABS 3 and 4 star outlets. A systematic approach to dissemination is adopted, which brings internal and external dissemination to academic and practitioner audiences. A combination of academic and press channels is used.

Service science is quite interdisciplinary by nature, evidenced also by the range of journals the members of the group publish in (including service research, service design, economic psychology, marketing, health studies and computer science etc.)

10.5.4 Networking

The nature of the group's network, with both academic and practitioner partners, is as would be expected. There is further potential to grow the international network. It would have been interesting to learn more about CSI's links with policy, which is little explored.

10.5.5 Interplay between research and education

Contributions are made by research group members at postgraduate and executive levels, with a particular focus on contributions that can be linked directly to the group's research on a new master's programme in New Business Development. On the basis of the information provided, it is not easy to establish the extent to which all members of the group contribute to teaching, or whether this is focused on particular individuals.

10.5.6 Societal relevance and impact

To widen its academic and practical impact, group members deliberately work collaboratively with other disciplines. Given that the external funding environment has moved strongly in the direction of supporting research that tackles Grand Challenges – which typically demand interdisciplinary approaches – this is a positive move.

CSI has established partnerships with a variety of Norwegian businesses – as would be expected given the research it prioritises – and a mix of Norwegian and international institutions. Presumably there will be opportunities to further grow the international networks over time.

The impact case on 'Service design & design thinking in Telenor' submitted by the group is a good example of the transdisciplinary research the group is involved in with partners both from academia (also other institutions) and practice.

In relation to the impact of its research, the group is motivated by the desire to undertake studies that will help to make service firms more prosperous, and thus supports the prosperity of the Norwegian economy. The Telenor case indicates that the group has the capacity to create that kind of business and societal impact. There is also a programme of activity to develop teaching resources and programmes, to provide an educational outlet for the group's work.

10.5.7 Overall assessment and feedback

This well-organised group demonstrates very good scientific quality that is evidenced through the quality of its publications, by the mobility of the research staff it has trained, and through the impact of its work on practice. The group utilises systematic dissemination methods. It is well connected with other institutions, and it also has strong partnerships with industry.

A priority for the group is to consider its sustainability beyond 2019. Reflecting this need, CSI has had some success in attracting some further project funding as well as some income in the form of paid member organisations. Optimally, the funding beyond 2019 would also include more stable long-term funding in order to allow the members of the group to fully focus on the scientific work instead of having to spend excessive amounts of time applying for funding piece-by-piece.

Assessment of research group: 5 – excellent

10.6 Research group: Future-Oriented Corporate Solutions

The research group Future-Oriented Corporate Solutions (FOCUS) has its roots in a multidisciplinary research initiative starting in 2012, which was established in 2014 as a 'national area of expertise'. It is one of NHH's strategic research initiatives. The research group aims to explore new types of organisational solutions in a broad sense, comprising organisational structure, control systems, human resource management and leadership, with the focus on contributing to the competitive advantages of Norwegian-based firms.

10.6.1 Organisation, leadership and strategies

FOCUS is differentiated into two sub-research programmes: FOCUS CiBiViCi (Cross-border value creation) investigates how international activities are organised with the aim of cross-border value creation. FOCUS ACTION studies how more dynamic control systems can be developed and implemented. For each of the sub-groups, a leading professor is designated who, together with a director at professorial level, forms the leadership team. Given the number of PhD students and postdocs this appears suitable.

The FOCUS group aims to develop new insights, theories and concepts on practically relevant topics. The results are intended to be published in the 'very best international journals'. With respect to impact, FOCUS particularly addresses Norwegian firms whose strategic positions, decisions and processes are intended to be enhanced by FOCUS's research, which is a rather ambitious objective.

A major part of external research funding is based on corporate partners, which appears reasonable given the objectives of the research group, and a slightly minor part is based on RCN funds.

With its claim of high-level publications combined with its emphasis on enhancing competitive advantages for Norwegian firms, the FOCUS group is in line with NHH's overall goals. The research group can benefit from the institutional arrangements provided by NHH, for example, strong incentives for outstanding research, awards for dissemination, the PhD programme, international recruitment practices etc. The FOCUS group would appear to make use of these arrangements (e.g. PhD students, international networks).

10.6.2 Research personnel

The FOCUS research group's main recruitment activities seem to be related to hiring PhD students and postdocs. These junior researchers are recruited internationally, which is in line with NHH's general recruitment policy. The PhD students as well as the postdocs are integrated into the research activities by means of collaboration with senior researchers and the corporate partners, which seems appropriate and productive. Moreover, junior researchers seem to make use of international exchanges and find prestigious destinations. The composition of personnel with respect to gender appears well balanced, and there is a remarkably high diversity with respect to age and nationality.

10.6.3 Research production and scientific quality

The productivity in terms of publications, particularly in international peer-reviewed journals, is very high. A considerable proportion of the publications go beyond the traditional paths of the domain – may it be by critically reflecting on traditional concepts and their adoption (e.g. pay-for-performance), by directly investigating 'avant-garde' concepts (e.g. so-called 'Beyond-budgeting') or by incorporating new perspectives into traditional fields of Economic-Administrative research (e.g. networking ability into concepts of work performance).

The FOCUS group employs approaches from other disciplines as researchers from different NHH departments and external researchers from outside the domain are involved, which is demonstrated by co-authorships of publications and in the publication outlets. Moreover, integrating practitioners into research as regularly takes place in FOCUS warrants a certain level of multi-perspective approaches.

Overall, given the productivity, originality, scientific contributions and international visibility of the publication outlets, the research quality is at an excellent level in the particular domains addressed by the FOCUS group.

10.6.4 Networking

The FOCUS group uses a multifaceted network for collaborations. As already mentioned, collaboration across different NHH departments takes place as well as intense cooperation with industry partners, which is also particularly valuable to PhD students. Moreover, the research group has a network of international partners in academia, which is obvious even in joint publications.

10.6.5 Interplay between research and education

A number of courses in the bachelor's as well as the master's programme at NHH comprise courses related to FOCUS's research topics and, hence, these courses are taught by group members. Moreover, a remarkably high number of master's theses have been written in the context of FOCUS.

10.6.6 Societal relevance and impact

The knowledge exchange/dissemination performed by the FOCUS group is organised and documented in various ways, from integrating practitioners into research to joint publications, regular meetings/workshops/discussions with industry partners and newspaper articles.

The FOCUS group's entire research programme is motivated by and directed towards further improving the competitive position of Norwegian companies. The research results provide a deepened understanding of value-creation and/or orientation towards improved business practices. Given that successful companies are among the preconditions for welfare, the social and economic impact of the FOCUS group is very high. This is demonstrated in the impact case ORGCHANGE where research in real time followed the organisational changes in an international firm in the telecommunications business. This led to impact on the concrete changes and added to knowledge of successful organisational changes in international firms.

10.6.7 Overall assessment

The FOCUS group aims to develop new insights, theories and concepts on organisational solutions to enhance the strategic advantages of companies in an international and dynamic context. The scientific quality is of a very high level, documented in publications with high international visibility. The research group's topic is at the very core of Economic-Administrative research and, thus, contributes substantially to the overall profile of NHH in this domain.

Assessment of research group: 5 - excellent

10.6.8 Feedback

Given the excellent quality of the research group's scientific output, it is worth mentioning that this research group does not seem to receive funding from international sources and, nor does it receive funding from the EU. It may be interesting to look for specialised EU funding initiatives that are

dedicated to cooperative projects between universities and corporate partners, which could fit with the research agenda of this research group.

10.7 Research group: Norwegian Centre for Taxation

The Norwegian Centre for Taxation research group (NoCeT) focuses on public finance. The group is fairly small (five permanent members, three postdocs and two PhDs). In addition, NoCeT has three adjunct professors and a network of affiliated researchers in Norway, Germany and in the US.

10.7.1 Organisation, leadership and strategies

Three of the members of permanent staff constitute the management team. In addition, the group has an international advisory board composed of leading scholars. The advisory board is consulted in matters regarding research and recruitment.

The group has a focused strategy with the aim of being one of the leading research environments on taxation in Europe and of having policy impact. The strategy is aligned with the overall strategy of NHH emphasising research excellence and dissemination.

An important instrument for achieving research excellence is international collaboration. The group's research affiliates are well-established researchers in the field, and the group collaborates with international partners on the organisation of seminars and conferences.

The group places emphasis on interaction with policymakers. It meets regularly with the Norwegian Tax Administration as well as other public authorities, and it co-organises an annual event for tax practitioners and academics in Norway.

NHH provides the group with basic research infrastructure such as fixed positions, offices, library access, IT services etc.

10.7.2 Research personnel

NoCeT invests in building a close relationship with the best master's students at NHH, and it has been successful in recruiting some of these to PhD studies.

The permanent staff regularly interact with junior members of NoCeT. They introduce them to their international networks and co-author papers with them. In 2017, the group is also organising two specialised PhD courses on issues related to taxation. However, the previous course was in 2014.

NoCeT emphasises the international mobility of young researchers, and all PhDs and postdocs have spent time at a university abroad. This exposes them to a different research environment and helps them build an international network. The enclosed CVs suggest that NoCeT has been successful in recruiting postdocs and assistant professors on the international market.

The gender composition of the group is skewed. Among the permanent academic staff, one out of seven researchers is female. The gender composition is more balanced among PhDs and postdocs, where two out of five researchers are female.

10.7.3 Research production and scientific quality

Overall, the research group is very productive and the average quality of the articles is high. The members of NoCeT have published 40 peer-reviewed articles on public finance since 2012, and 16 of these articles are published in level 2 journals. The submitted CVs show that the permanent members

of the group account for a significant proportion of these publications. While the members of NoCeT publish regularly in the leading field journals, they should have the potential and ambition to publish in top 5 economics, accounting and finance journals. There are some revised and resubmitted submissions to top journals indicating that this goal might be reachable.

The submitted papers are well-crafted and address relevant questions. This is also reflected by the fact that almost all papers are level 2 publications. Members of NoCeT have written several articles on the taxation of multinational firms that have been published – or, are being published – in leading field journals. This is an important topic for a small open-economy such as Norway, and the group has advanced our understanding of it.

The group primarily takes an economics approach to the questions studied. For a number of the topics studied, law and accounting are important related fields. Indeed, the group has a professor of accounting on the advisory board, and NoCeT collaborates with the University of Bergen on strengthening the discipline of tax law in Norway. However, the members of NoCeT do not seem to be involved in truly interdisciplinary research with accounting and legal scholars.

NoCeT is a research group with a focused research agenda, high productivity and publications of high average quality. The members publish regularly in the leading field journals. The submitted papers are all of good quality. They address relevant and interesting research questions using the appropriate methods. It is the group's ambition to be one of the leading groups in Europe in the area of public finance. At this stage, the group perhaps lacks publications in the very best journals in order to fulfil this ambition.

10.7.4 Networking

The group has a strong national and international network. Part of this network consists of adjunct professors and members of the advisory board. The group also co-organises conferences and workshops with research groups in Norway and abroad. The successful networking efforts are also reflected in co-authorships. Indeed, several of the submitted publications are co-authored with researchers based at other universities in Norway and abroad.

10.7.5 Interplay between research and education

The group faces a significant demand for teaching related to public finance, and NoCeT contributes to a number of courses in the bachelor's and master's programmes in economics and business administration. The group seems to have contributed less to teaching at graduate level, which is somewhat surprising given NoCeT strong research-orientation. For this reason, it is positive to notice that NoCeT is offering two PhD courses in 2017. There is room for improvement in this area however.

10.7.6 Societal relevance and impact

NoCeT has carried out extensive research on the taxation of multinational companies. The group provides a convincing case where the Norwegian Tax Administration implemented taxation rules for multinational corporations based on the principles outlined in work by members of NoCeT. Beyond this specific example, the close interaction with the Norwegian Tax Administration and other public authorities is likely to be very valuable from the point of view of society.

10.7.7 Overall assessment

This is a research group with a strong focus on public finance. It has high productivity, and the scientific publications are of high average quality. The close links with the Norwegian Tax Administration and other public authorities ensure that the group has impact beyond academia. NoCeT is close to fulfilling

its ambition of being a leading research group on public finance in Europe, but perhaps lacks at this stage publications in top 5 journals in economics to fulfil this ambition.

Assessment of research group: 4 - very good

10.7.8 Feedback

While NoCeT is doing well in terms of publication, it is important to keep trying to publish in the top journals. The group may also consider whether there is scope for more interdisciplinary research. It is also recommended that the group invests more systematically in PhD training.

10.8 Research group: Centre for Strategy, Organisation and Performance

Founded in 2015, the research group Strategy, Organisation and Performance (STOP) is a rather young initiative at NHH. The key topic addressed by the STOP group is to study ‘the causes of performance variation across firms and industries’. Due to the rather early stage of the lifecycle, the group emphasises that they were and are working on their group’s size in order to gain an efficient scale and on building a promising research network.

10.8.1 Organisation, leadership and strategies

So far, the STOP group comprises seven members from NHH (of whom two are PhD students) and two adjunct professors. The leadership is performed by one person at the professorial level. Given the manageable size of the group, this appears appropriate.

Within the thematic frame, the STOP group focuses on four issues: (1) recessions and industry shocks, (2) strategic human capital, (3) boundaries of the firm and (4) entrepreneurship. The reasoning for these foci is based on the specific research competencies of the group members and particular research opportunities. The group aims to build a group with the ‘highest scientific output per researcher’. The group emphasises the importance of collaborations as well as being an attractive partner for collaborations in terms of own research infrastructure and high research reputation. Of course, these considerations address key success factors in research.

So far, the STOP group does not make use of external research funding, but is working on RCN applications and, in the long run, intends to apply for EU funds.

The topics addressed by the STOP group are in the very core of Economic-Administrative research and, thus, promise to contribute to NHH’s profile in research. Moreover, the topics meet a teaching demand cited by students.

The STOP group intends to produce high-level publications that correspond to NHH’s strong focus on research excellence.

For this, the STOP group can benefit from the institutional arrangements provided by NHH, such as, for example, strong incentives for outstanding research. Moreover, NHH provides support for writing applications for external funds which the STOP group intends to use.

10.8.2 Research personnel

The STOP group expects to grow by two to four PhD students over the next two years, with positions being advertised internationally.

The training and mentoring of PhD students and postdocs is organised in weekly meetings. Junior researchers are co-authors of joint publications and (financially) supported to participate in conferences. Moreover, PhD students visit PhD courses at other institutions.

The majority of the STOP group members are male (five out of seven of the NHH members); the diversity with respect to age and nationality is remarkably high.

The mobility of STOP group members, and in particular of the PhD students, so far, appears to be at a rather low level, which is reasonably caused by the early stage of the research group's development and its current focus on building a network.

10.8.3 Research production and scientific quality

The senior researchers of the STOP group clearly achieve a high productivity level in terms of the number of papers in peer-reviewed journals with high international visibility and good scientific reputation. The research findings provide new perspectives, for example, addressing the issue of exploration and exploitation (traditionally studied in the context of innovation) in the context of investments in human capital in recessions. The group currently works on a database on human capital and labour mobility.

The rather young age of the STOP group presents some limits in assessing its research production and science quality. However, the senior members achieve a high research performance and the first results of the STOP group are promising. In this context, the scientific quality is at a very high (scale 4) level.

10.8.4 Networking

The STOP group places particular emphasis on building a research network, focusing on collaborations for joint papers and projects. With very few exceptions, the network so far mainly consists of academics from European universities.

10.8.5 Interplay between research and education

The STOP group contributes to the bachelor's and master's programmes. According to the time spent, the STOP group is extensively engaged in executive training, while – compared to the other programmes – the group contributes less to the PhD programme.

10.8.6 Societal relevance and impact

The STOP group's dissemination/knowledge exchange activities take different forms as, for example, the aforementioned executive training programme, presentations at practitioners' conferences or (informal) discussions with authorities/decision-makers. Moreover, the group regards journals oriented towards practitioners and media appearances as important modes of dissemination.

The research focus of the STOP group is primarily based on a deeper understanding of the causes of performance variations across firms and industries, and this topic is of obvious relevance to the economy and society. However, relevance and impact may be increased by developing normative understanding.

10.8.7 Overall assessment

The STOP group is at a rather early stage of its development (causing some challenges for the evaluation). This is obvious with respect to several aspects such as, for example, external research funding, graduated PhDs or the research network established so far. However, there are promising approaches and ideas – not least, based on the senior members of the research group's prior research

and with respect to its important thematic focus. Moreover, the STOP group appears to have intense, though rather informal contact with practitioners. Hence, there is the potential for further development and to make a remarkable contribution to NHH's strategy and to conduct high-quality and relevant research.

Assessment of research group: 4 - very good

10.8.8 Feedback

The STOP group's research topics are related to a rather broad range within its domain. If this is not only intended to reflect the research topics of the different 'sub-groups', but to form the basis for a common research agenda, it may be worth considering a more focused research agenda. This might also help to foster cooperation between the members of the research group – particularly since it appears that the collaboration among the members of the group could be intensified. The research group's intention to increase third-party funding could benefit from more intensive internal and external cooperation.

11 Nordland Research Institute

Nordland Research Institute							
Units included in the evaluation of economic-administrative research	- Nordland Research Institute			Listed researchers	9		
				Listed research groups	1		
				No. of researchers in listed research groups	9		
Other units of the institution	Training, recruitment and academic positions						
		2014	2015	2016			
	No. of PhD graduated at the institution per year						
	Male/Female	-/1	-/-	-/-			
	Total per year	1	-	-			
	No. of positions announced / No. of qualified applicants per year						
R&D expenditures and sources of funding (1000 NOK)			2014	2015	2016		
Funding of the institution			PhD positions	1/3	-/-	-/-	
Total expenditures	30 236	29 802	32 915	Post.doc positions	-/-	-/-	-/-
Types of funding			Permanent positions	2/2	6/17	5/19	
Core funding from the RCN	5 330	4 667	4 811	Education			
External funding, RCN	9 127	10 029	7 684	Study programmes BA level			
External funding EU	0	0	0	-			
External funding, other sources	26 719	21 684	32 675	Study programmes MA level			
				-			
				Other			
				* Total numbers for applicants. Five economic-administrative researchers were recruited: 2 in 2014, 1 in 2015, 2 in 2016.			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

11.1 Economic-Adm. research at the institutional level

Nordland Research Institute (NRI) was founded in 1979, and it became a limited liability company in 2010. It is co-owned by Nord University (51% holding) and Nordlandsforskning Foundation (49% holding). NRI employs around 30 researchers (FTE) in total, and nine researchers are listed for the Economic-Administrative panel.

11.1.1 Organisation, leadership and strategy

NRI is led by a management team consisting of the managing director and three research directors. Each research director manages one of the three research units. The research units are interdisciplinary and cover the following areas: 'Environment and Community', 'Welfare, Health and Work', and 'Entrepreneurship, Innovation and Regional Development'.

In addition, there are seven research groups that cut across the research units. Three of these groups are prioritised as strategic research areas: 'Green Shift', 'Welfare Service Innovation' and 'Entrepreneurship and Innovation'.

NRI's strategic vision is 'Knowledge for shaping the future', and the main objective is 'For NRI to be an excellent research institute and a preferred partner in national and international research cooperation'. It has seven strategic goals concerning expertise, quality, network, publishing, dissemination, relevance and competitiveness. NRI should be a competitive research institute that performs high-quality research, develops solutions to societal challenges and engages with the scientific community as well as society at large. The strategic objectives have more specific performance targets that were not included with the self-assessment report. Overall, the objectives seem somewhat general and not tailored to the specific challenges that NRI faces. A strategy that took NRI's current strengths and weaknesses as its starting point and set out priorities would provide more guidance to management.

11.1.2 Institutional follow-up of previous evaluations

In 2010, sociological research at Nord University (then Bodø University) and NRI was evaluated. One of the recommendations was to strengthen scientific publication, and NRI has focused on improving its publication performance.

11.1.3 Resources and infrastructure

In the period 2014-2016, core funding from the Norwegian Government constitutes around 15% and external funding from the RCN around 20% of total expenditure. There is some external funding from private Norwegian sources, but the largest share of external funding comes from other public Norwegian sources. Although there are many different sources of external funding, NRI would be very vulnerable to public sector budget cuts. Increasing the proportion of external funding from private and international sources would make NRI more resilient to such budget cuts. The decision to appoint a project controller to professionalise project administration and to increase international project efforts is a step in this direction. Although NRI perceives EU funding as being demanding to administrate, it has also formed a group of 'EU ambassadors' who follow the EU research programmes, take courses in how to apply for EU grants and participate in EU network meetings etc.

NRI provides researchers with basic research infrastructure such as computers and software as well as access to databases and academic literature.

11.1.4 Research environment

The location of NRI is likely to make external research collaboration more difficult, but NRI tries to overcome this barrier by organising workshops and conferences and by ensuring professors from abroad are affiliated to the research groups. Together with Nord University, NRI has organised several important entrepreneurship conferences, including the prestigious Babson College Conference on Entrepreneurship. PhD students and other researchers at NRI use different exchange programmes to spend time abroad. NRI does not have a system of sabbatical leave. Overall, the numbers suggest that NRI's networking efforts are quite successful, and NRI's proportion of internationally co-authored articles is close to the national average for the panel. NRI also collaborates extensively with non-academic partners, and the research projects are often the result of discussions on the challenges these partners face in their work.

11.1.5 Research personnel

NRI does not invest heavily in PhD training in the Economic-Administrative area: In the period 2014-2016, one PhD position was advertised, and three PhD students are affiliated with the Entrepreneurship and Innovation group. Given the close collaboration with Nord University, the most efficient division of labour may well be to let Nord University be in charge of PhD education. The PhD students at NRI are usually employed for four years, but have to spend 25% of their time on external projects. It is mentioned in the self-assessment report on the Entrepreneurship and Innovation group that all PhD students have the possibility to spend a period abroad. This exposes them to a different research environment and helps them build an international network. No other details regarding the training of PhD students were included in the self-assessment report.

NRI has not signed the European Charter and Code, and its implementation is not a priority due to the associated administrative burden.

The gender balance is skewed at NRI, and there is female predominance among the scientists and the employees in leading positions. NRI considers this when recruiting and aims for a more balanced gender composition over time. More specific gender policies do not appear to be in place.

NRI advertises open positions annually. The potential job market is limited to Scandinavia as candidates must be able to work in English and one of the Scandinavian languages. NRI does not seem to look to international job markets, in order to expand the pool and the quality of applicants. Rather than targeting researchers working in Scandinavia only, hiring international candidates and requiring them to learn Norwegian within the first 2-3 years may be an alternative policy that strikes a better balance between the need for strong candidates and the ability to communicate with local sponsors and other stakeholders. During the interview, it was mentioned that NRI recently hired an international researcher who does not speak a Scandinavian language. Making greater efforts in recruitment is likely to be a good investment given the relatively large number of open positions every year (14 job openings in the period 2014-2016, five in the Economic-Administrative area) and NRI's high scientific ambitions.

Researchers at NRI spend 72% of their working time on externally funded projects. The remaining working time is called 'internal time' and is spent on initiating projects, meetings, administration etc. It is assumed that the internal time includes the work required to transform the output of a project into a scientific publication. If so, researchers at NRI seem to have relatively little time for more basic, publication-oriented research compared to university researchers.

11.1.6 Research production and scientific quality

Looking at publication points per researcher in the period 2014-2016, researcher productivity is well below the average for the panel. There appears to have been a drop in research productivity from 2011-2013 to 2014-2016, but this might also be due to changes in the number of employees.

Looking at journal articles, NRI has experienced a drop in the quality as measured by the proportion of level 2 articles. In the period 2011-2013, NRI has a larger proportion of level 2 journal articles than the average for the panel. In the period 2014-2016, the proportion of level 2 articles is well below the average for the panel.

NRI's research impact as measured by citations is close to the average for the panel in the period 2011-2013, but below average in the period 2014-2016.

In the period 2011-2013, book chapters represent roughly the same proportion of NRI's publication output and are of similar quality as the average for the panel. However, in the period 2014-2016, book chapters represent a significantly larger proportion of NRI's publication output than average for the panel. The quality of the book chapters is high in this period, and more than two-thirds of the book chapters are level 2.

Focusing on the period 2014-2016, these numbers suggest that the research productivity at NRI is below the national average. The overall quality, as measured by the proportion of level 2 publications, is higher than the average for the panel, but this is almost entirely due to a large proportion of level 2 book chapters. In the period considered, researchers at NRI only published one level 2 article in the Economic-Administrative area. One possible explanation for the pattern observed in the data is that researchers at NRI increasingly choose to publish their best work in book chapters rather than in academic journals. Irrespective of why the proportion of level 2 journal articles has dropped, it is crucial for NRI's academic reputation to increase publishing in the best journals.

The papers submitted are of good quality and published in well-known journals or in books issued by reputable publishers. This is also indicated by the fact that four out of ten publications are level 2 publications. There is only one article in a top journal according to, e.g. the ABJ or FT50 rankings.

NRI aims for the Entrepreneurship and Innovation group to become a Group of Excellence or Project of Excellence in 2020. The management seems to be aware of the challenges in terms of publishing, and it has set the following goals: i) Increase activity in the area of innovation and entrepreneurship, ii) ensure and support academic publication, iii) develop individual career and publication plans, iv) incentivise publication through grants and awards, v) invite renowned scientists in the field to come and work with researchers at NRI and to teach NRI researchers the 'tricks of the trade', vi) encourage researchers to review for scientific journals, vii) present at international conferences, and viii) organise conferences in the field of innovation and entrepreneurship together with Nord University. In addition to this, the Entrepreneurship and Innovation group aims to hire researchers with relevant competence.

The goals are a step in the right direction and – if implemented well – could contribute to strengthening NRI's publication performance. It should be noted that several of the goals are minimum requirements for researchers to publish in good academic journals. For example, a researcher that does not present his/her work at international conferences, does not review articles for scientific journals, and has not learned how to craft an academic paper is unlikely to be able to publish in a reputable international journal. It is also important to consider how to retain and increase the productivity of the researchers who are already able to publish well. Allocating these researchers time to write papers and to publish them seems an important instrument in this regard. Publishing articles in high-ranking journals is very time-consuming, time that may be difficult to find in an environment where there is constant pressure

to obtain funding for new projects. In the SWOT analysis, it is noted that research talent leaves NRI to work at universities. Strong researchers are motivated by research and want to keep publishing, in order to maintain their 'market value' in academia. Securing the researchers who are able to publish well, the necessary time to do so may also help NRI to attract researchers with greater potential in terms of publication.

Assessment of scientific quality: 2 - fair

11.1.7 Interplay between research and education

As a research institute, teaching is not one of NRI's main activities. However, some of the researchers are involved in university teaching and supervision.

11.1.8 Societal relevance and impact

NRI has a strategy for dissemination. Every project needs a plan for dissemination, and knowledge exchange is a part of every researcher's job. NRI aims to be present in different media, to organise seminars and conferences for practitioners and academics and to participate in debates etc.

The impact case Entrepreneurship and Innovation concerns three research projects that look at innovation in the tourism sector. These appear to be successful projects, and have resulted in a large number of publications. There is also no doubt that NRI researchers have been deeply engaged with the industry and have influenced how the local tourism industry pursues innovation. However, the description of the specific activities and results is too vague to demonstrate societal impact.

In terms of the Norwegian Government's Long-term plan for research and higher education, NRI has contributed to i) public sector renewal, better and more effective welfare, health and care services; ii) climate, environment and clean energy; and iii) innovative and adaptable industry.

11.1.9 Overall assessment

NRI's main objective is 'to be an excellent research institute and a preferred partner in national and international research cooperation'. Focusing on the period 2014-2016, NRI's research productivity is below the national average as measured by publication points per researcher. The overall quality, as measured by the proportion of level 2 publications, is higher than the average for the Economic-Administrative panel, but this is almost entirely due to a large proportion of level 2 book chapters. Researchers at NRI only published one level 2 journal article in the Economic-Administrative area in this period. The numbers suggest that NRI has experienced a drop in the number and quality of articles published in scientific journals. Increasing the number of articles published in high-ranking academic journals is important for maintaining NRI's academic reputation and for achieving the ambitious goals of the Entrepreneurship and Innovation group. NRI mainly collaborates with the public sector, and several of its activities have contributed to the development of the local tourism industry.

11.1.10 Feedback

Based on the above, there are four recommendations:

- i) Recruit more actively and search beyond Scandinavia, in order to improve and expand the pool of candidates for vacant positions.
- ii) Implement measures to increase the proportion of level 2 journal articles.
- iii) Allocate time for researchers to publish in scientific journals.
- iv) Increase the proportion of external funding from private and international sources, in order to diversify the portfolio of externally funded projects.

11.2 Research group: Entrepreneurship and Innovation

The research group Entrepreneurship and Innovation has nine members (including three PhD students) and ten affiliated members. The group is one of three research groups at Nordland Research Institute (NRI). It collaborates closely with the Department of Innovation and Entrepreneurship at Nord University, and researchers have been rotating between the two groups.

11.2.1 Organisation, leadership and strategies

The group is led by a research director who has a 50% administrative and 50% research position and who is part of the NRI management team. The group organises activities such as seminars and monthly meetings.

NRI aims for the research group to become a Group of Excellence or Project of Excellence in 2020. The Entrepreneurship and Innovation group is thus central to NRI's strategy, and the research group contributes to NRI's goals by conducting high-quality research in the area of entrepreneurship and innovation, publishing in academic journals and books, building networks (e.g. by organising international conferences in the area of entrepreneurship and innovation), recruiting talented researchers, and by inviting and collaborating with renowned scholars in the field.

Like the rest of NRI, the group is highly dependent on external funding. It has been quite successful in obtaining RCN grants in the area of innovation. The external funds come from a large number of different projects, reducing its dependency on a few projects. However, more than 25% of the external funds come from the RCN, and almost 90% of the external funds come from the public sector in Norway. Hence, the group is vulnerable to budget cuts in the public sector. The group receives a small amount of EU funding, but aims to increase this type of funding.

11.2.2 Research personnel

The location of NRI is likely to constitute an obstacle to outside recruitment, especially at the senior level. Perhaps for this reason, the group stresses in the self-assessment that the local research environment allows a researcher to follow a complete university career from student to full professor. Indeed, among the permanent members of staff who hold a PhD, most members have a PhD from Nord University (or one of Nord University's previous incarnations). While training local talent is both important and necessary, research excellence may require more outside recruitment. The best talent and most exciting new ideas are not necessarily found in the local environment.

The group has three PhD students. PhD students have the possibility to spend a period abroad, which exposes them to a different research environment and helps them build an international network. No other details regarding the training of PhD students were included in the self-assessment.

The gender composition of the group is skewed, and only one out of six permanent members of staff is female. This is below the average for the panel.

11.2.3 Research production and scientific quality

Overall, the group is research-active. The members of the group follow the interdisciplinary approach common in management research and draw upon a number of fields such as economics, sociology, psychology and economic geography. The group has for example contributed to the understanding of innovation and entrepreneurship in the tourism industry and to entrepreneurship among immigrants.

Most members of the group publish in international field journals and books. The five submitted papers are well-crafted and show good command of the relevant methods. In terms of quality, one book chapter and one journal article were level 2 in the year of publication. The remaining three papers are level 1 journal articles. The CVs of the listed members show that a) a large proportion of the group's research output is published in book chapters, and b) the quality of the book chapters is higher than the quality of the journal articles. This reflects the pattern found for NRI overall. Among the most important publications listed in the members' CVs are seven level 1 articles and seven level 2 book chapters, but only one level 2 article and one level 1 book chapter. There is no top publication according to ABJ, FT50 or similar rankings.

It is the group's ambition to become a Centre or Project of Excellence. However, in order to become one of the leading groups in the field in Norway, the group needs to publish more in the best journals.

11.2.4 Networking

The group appears to have a strong national and international network, partly through its collaboration with Nord University. The group invests in building an international network, and it has co-organised several international entrepreneurship conferences, including the prominent Babson College Entrepreneurship Research Conference. The group also has close collaboration with research groups around the world and collaborates extensively with local counties and different private organisations. However, the assessment panel notices that only one of the submitted papers is written with an international co-author.

11.2.5 Interplay between research and education

As part of a research institute, education is not one of the group's main activities.

11.2.6 Societal relevance and impact

The research group follows NRI's dissemination strategy, and the impact case is the one submitted by NRI. Both items are described above.

11.2.7 Overall assessment

This is a research-active group. Members of the group regularly publish level 2 book chapters, but there are very few articles in level 2 journals. The group has high ambitions, but it needs to publish more in the best journals in order to become one of the leading groups in the field in Norway. Although some aspects of the impact case could be more convincing, there is no doubt that the research group has made an important effort to stimulate innovation in the local tourism industry.

Assessment of research group: 2 - fair

11.2.8 Feedback

In order to achieve research excellence, the group needs to increase publication in the best academic journals. It may also be advisable to further diversify its sources of external funding. Finally, an increased effort to recruit in the international market could be important for improving the group's scientific performance in the longer term.

12 Nord University - Business School

Nord University - Business School							
Units included in the evaluation of economic-administrative research	Nord University - Business School			Listed researchers	65		
				Listed research groups	2		
				No. of researchers in listed research groups	35 (50 CVs)		
Other units of the faculty (institution)				Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	3/5	1/4	0/2
				Total per year	8	5	2
				No. of positions announced / No. of qualified applicants per year			
R&D expenditures and sources of funding (1000 NOK)							
	2014	2015	2016				
Funding of the institution				PhD positions	6/14	5/16	14/49
Total expenditures	101 875	106 160	126 029	Post.doc positions	3/5	4/22	1/5
Types of funding				Permanent positions	5/5	2/2	5/5
Core funding from the RCN	75 900	78 779	93 492	Education			
External funding, RCN	4 778	8 079	7 763	Study programmes BA level Økonomi og ledelse, Eiendomsmegling, Regnskap og revisjon, Informasjonssystemer, Trafikkklærerutdanning, Årstudium økonomi og ledelse			
External funding EU	351	134	72	Study programmes MA level Business Management, Energy Management, Master in Business Administration			
External funding, other sources	20 846	19 168	24 702	Other The institution has recently been through two mergers; first between the University of Nordland and Nesna University College from 1.1.2016, and then between the University of Nordland and Nord-Trøndelag University College from 1.1.2017. Campuses at Bodø, Steinkjer and Levanger.			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

12.1 Economic-Adm. research at the institutional level

Nord University is the result of two mergers. Firstly, between the University of Nordland (previously Bodø University College) and Nesna University College in 2016, and then between the University of Nordland and Nord-Trøndelag University College in 2017. Nord University Business School (HHN) is a faculty within Nord University with 65 listed researchers.

12.1.1 Organisation, leadership and strategy

Due to the merger, the strategy is being revised. As the outcome of this process is unknown, this evaluation will be backward-looking. It focuses on the strategy currently in place and evaluates past performance.

The dean is the head of the business school, and two vice-deans oversee education and research activities, respectively. The two vice-deans head the committees that deal with issues related to education and research. The faculty is organised into four divisions and two research centres, each led by a member of the scientific staff.

The objectives of Nord University Business School (HHN) are to be a leading business school within prioritised areas, to be attractive and visible to staff and students, and to take a particular responsibility for education and research in business management in the development of the High North (Nordområdene). For a local business school such as HHN, these seem adequate yet ambitious goals.

The current strategy states that HHN should (i) have a leading national and international position within 'Innovation and entrepreneurship' and 'Research on the High North', (ii) maintain and develop its position in the areas 'Search and rescue', 'Experience based tourism', 'Public accounting', 'Transport and logistics', 'Ecological economics and ethics' and 'Technology management', and (iii) generate solid research activity within central business school areas such as Finance, Accounting, and Organisation.

Prioritising Innovation and Entrepreneurship and Research on the High North seem appropriate choices given the current strengths of HHN and its ambition to contribute to the development of the High North. While becoming a leading university in an established field such as Innovation and Entrepreneurship is an ambitious goal, it is less clear to what extent this is true for Research on the High North. The many areas in which current strengths should be preserved and developed also raises the question of whether the strategy leaves room for redirection of HHN's research activities.

The location of HHN is likely to constitute a barrier to external recruitment. HHN tries to overcome this barrier by supporting international collaboration and research visits to other universities and by hiring well-established researchers in part-time positions. For the Department of Innovation and Entrepreneurship, these measures seem to have been successful. Another indication of successful internationalisation is that HHN's proportion of internationally co-authored articles is close to the national average for this panel.

In the period 2014–2016, the level of external funding was one of the highest among the universities in the panel (around 25% of the overall budget). The external funds are used differently by the various research groups. For some groups, external funds cover a significant part of the research staff's salary. In one of the groups, external funds are primarily used to finance new data. HHN supports fundraising by organising courses and providing support from the central administration.

12.1.2 Institutional follow-up of previous evaluations

Following up on the most recent evaluation, HHN has strengthened its doctoral training by offering more internal courses and by starting to develop a structured PhD programme in Innovation and Entrepreneurship.

12.1.3 Resources and infrastructure

The university has lower research funding than some of the more well-established universities, making it more dependent on external funding. HHN intends to implement a new system for project management of external funds

12.1.4 Research environment

HHN encourages research staff to visit other universities and to collaborate externally. The research staff can apply for funds for such visits and collaborations, and longer visits are facilitated by a sabbatical semester every third year, subject to applications being granted for research leave.

12.1.5 Research personnel

HHN is able to attract external PhD students, but it is difficult to attract researchers who already possess a PhD. An exception is the Department of Innovation and Entrepreneurship, which has had some success recruiting externally, especially postdocs. However, the number of qualified applicants per position is low for permanent positions.

In terms of PhD training, HHN offers 5 to 10 courses per year and participates in different doctoral consortia. Most PhD students spend time at a university abroad and obtain financial support to help cover the expenses. This can be an important part of PhD training as PhD students experience a different research environment and can follow specialised PhD courses.

Nord University has signed the European Charter and Code, and HHN is now awaiting its implementation.

The proportion of staff in senior positions (associate and full professors) is relatively low at HHN, and it has started a competence programme that aims to help staff members to qualify for these positions. Another way of helping staff members to qualify for a more senior position would be to give them more research time. Currently, assistant professors – who are in the beginning of their careers and need to build a research agenda – are allocated less research time than associate and full professors.

While the gender balance is skewed at HHN, the proportion of female researchers is similar to the national average for the panel. Nord University has a policy that includes gender concerns, and all scientific committees are required to have female representation.

12.1.6 Research production and scientific quality

HHN encourages and supports staff visits abroad, and well-established, international researchers are hired in part-time positions. These policies help the research groups to connect with the research frontier and to stimulate knowledge exchange and learning. HHN also incentivises – and signals the importance of – publishing using publication bonuses.

The number of publication points per researcher at HHN is below the Norwegian average. Looking at HHN overall, the proportion of publications in top 10 journals is slightly below the national average. Researchers at HHN still publish regularly in the very best journals. Turning to the Economic-Administrative panel, HHN's proportion of level 2 book chapters is slightly above the national average but its proportion of level 2 articles is slightly below the national average. Book chapters represent a

larger proportion of publication output than the average for the panel. The research impact at HHN, as measured by citations, is above the average for OECD and Nordic countries, but below the national average. Taken together, these numbers suggest that the research productivity at HHN is slightly below the national average, but that the research quality at HHN is comparable to the national average for the panel.

The papers submitted are of high quality and published either in good international journals or in books issued by reputable publishers. This is also indicated by the fact that almost all research samples are level 2 publications. The research samples cover different fields and authors and include examples of interdisciplinary research.

Assessment of scientific quality: 3 - good

12.1.7 Interplay between research and education

HHN has bachelor's and master's programmes in business administration and management, which all the research groups are involved in, and certain groups are responsible for more specialised programmes.

One of the main links between teaching and research is that elective courses are taught by active researchers in the field. This ensures that students are exposed to recent developments in the field. Students are primarily involved in research (e.g. data collection and analysis) when writing their master's theses. HHN also participates in a research centre that studies how innovation can be stimulated in education.

12.1.8 Societal relevance and impact

Researchers at HHN disseminate research to the general public in different ways: Reports, information material, newspaper articles, etc. Furthermore, HHN has chosen to form the Centre for Industrial Business Development (SIF) and the High North Centre for Business and Governance (HIGHNORTH) that cooperate with public authorities and private firms. The centres have helped to inform innovation policy in peripheral areas (SIF) and to promote educational and research programmes on industrial cooperation and value creation in the High North (HIGHNORTH).

The impact cases also demonstrate how the different research groups have:

- Interacted with firms and improved their understanding of management control systems and pricing.
- Conducted research that is useful to policymakers in the area of innovation policy and that has been cited by different policymakers, including the OECD.
- Participated in public debate on the Norwegian public accounting system and provided important scientific input to a reform of the system.
- Established joint education programmes with Russian partners and founded the High North Centre for Business and Governance.
- Enhanced awareness among firms and policymakers of how to stimulate innovation through the Centre for Industrial Business Development.

Some of the cases – in particular i) and iii) – convincingly demonstrate how the research conducted at HHN has had direct societal impact. The impacts differ in scale and importance. For instance, reforming the Norwegian public accounting system is likely to have greater impact than changing the management control system in a single firm. In other cases, the impact is more indirect and/or less well-documented. In particular, though the establishment of the HIGHNORTH centre is not impact

itself, the activities of the centre may have impact. Also, the description of the Centre for Industrial Business Development and its activities is too vague to demonstrate societal impact.

In terms of the Norwegian Government's Long-term plan for research and higher education, HHN has contributed to public sector renewal and higher quality and an innovative, adaptable private sector. HHN is also striving to make the Innovation and Entrepreneurship group world-class.

12.1.9 Overall assessment

HHN's objective is to become a leading business school within the research areas 'Innovation and Entrepreneurship' and 'Research on the High North'. It also takes particular responsibility for developing the High North through education and research. Overall, the activities of HHN are aligned with this strategy and contribute to reaching these goals. The research productivity at HHN is slightly below the national average, but the research quality at HHN is comparable to the national average for the panel. In terms of dissemination, HHN collaborates with both the public and the private sectors, and several of its activities contribute to the local business environment.

12.1.10 Feedback

Based on the above, there are three recommendations:

- Change the allocation of research time in such a way that junior staff do not have less research time than senior staff.
- Increase recruitment efforts in the international market in order to improve and expand the pool of candidates for vacant positions.
- Formulate a research strategy that provides more guidance to management on how to allocate the resources at its disposal.

12.2 Research group: Innovation and Entrepreneurship

The research group Innovation and Entrepreneurship is a large research group with 23 members (including seven PhD students and two postdocs) and seven affiliated members (including one PhD student). The group is one of four departments at Nord University Business School.

12.2.1 Organisation, leadership and strategies

The department has a strong focus on entrepreneurship and innovation. In line with Nord University's strategy, the department's goal is to be at the forefront of innovation and entrepreneurship research in Norway and internationally. An important instrument for achieving this goal is international collaboration. Members of the department work with leading international entrepreneurship scholars, and the department has hosted some of the major entrepreneurship conferences.

The department prioritises doctoral training, and it actively participates in the Norwegian Research School of Innovation. It is also currently developing a more structured PhD programme. The department aims to hire internationally, and it has had some success doing so at junior levels.

Approximately 20-30% of the research staff are funded by external projects. While this is a significant proportion, the external funding comes from a number of different projects, reducing its dependency on a few projects. However, around half of the external funding comes from the RCN, making the department vulnerable to cutbacks in RCN funding. The department is pursuing external grants targeting elite researchers and research environments such as the 'Norwegian Centre of Excellence in Research' and 'ERC grants', so far without success.

12.2.2 Research personnel

The location of Nord University is likely to constitute an obstacle to external recruitment, especially at the senior level. For this reason, recruitment, training and the retention of PhD students and postdocs are of central importance if the department is to achieve its ambitious goals.

The department makes significant investments in doctoral training. It has a fairly large number of PhD students given the size of the department, and it collaborates with other Norwegian universities on the provision of PhD courses. The department is currently developing a more structured PhD programme. While the details of this programme are not specified, this seems an important step in ensuring that PhD students arrive at the forefront of research.

The department has recently started to recruit PhD students and postdocs internationally, and it has been fairly successful in attracting external candidates. Turning to permanent staff, some members have a PhD from other Norwegian universities, but only one member has a PhD from abroad. In spite of the difficulties involved, increasing efforts to recruit senior staff in the international market would be important for complementing existing capabilities and for ensuring an inflow of new ideas and skills.

The gender composition in the department is balanced, and the proportion of female researchers is above the national average for the panel.

12.2.3 Research production and scientific quality

Overall, the department is productive in terms of research. With a few exceptions, the members of the department regularly publish in international field journals and make contributions to peer-reviewed books. The submitted papers are well-crafted, use interesting data and show good command of the relevant methods. At the same time, some of the papers address somewhat narrow research questions that may provide useful knowledge, but not fundamental new insight. The variance in ambition and quality of the papers is also reflected in the ranking of the publication outlets. While a few of the papers are published in the very best journals in the field (or even, among the best journals in management), most papers are published in lower-ranking field journals. However, the average quality is good, and 7 out of 11 articles are level 2 publications.

The department's research follows the interdisciplinary approach common in management research and draws on a number of fields such as economics, sociology, psychology and economic geography.

In summary, this is a productive research group, and the members of the department regularly publish in peer-reviewed journals and books. The submitted papers are of good average quality. The department's ambition is to become an internationally leading group in the area of innovation and entrepreneurship. However, in order to achieve this status, the members of the department need to focus more on publishing in the best journals in the field.

12.2.4 Networking

The department has a strong national and international network. This is witnessed by co-authorships with researchers at other Norwegian universities and abroad. Indeed, members of the department work with some of the leading international entrepreneurship scholars. Another indication of its strong network is that the department has organised several international entrepreneurship conferences, including the prestigious Babson College Entrepreneurship Research Conference.

12.2.5 Interplay between research and education

The department contributes to a number of different courses at all levels (bachelors to PhD). The department is also involved in the Centre for Engaged Education through Entrepreneurship, which is a Centre for Excellence in Higher Education.

12.2.6 Societal relevance and impact

The department's research on the commercialisation of research by universities and other public research institutions has been cited by policymakers in Norway and abroad, including the OECD. The evaluation of the policy scheme 'Forny', in particular, seems to have captured policymakers' interest (impact case 'Research and Innovation Policy'). The description of the Centre for Industrial Business Development and its activities is too vague to demonstrate societal impact (impact case 'Centre for Industrial Business Development').

12.2.7 Overall assessment

This is a fairly large, productive and internationally-oriented research group. The members of the department regularly publish in level 2 journals and books, but there are fewer publications in the very best journals. The department is one of the leading groups on innovation and entrepreneurship in Norway and perhaps even in Scandinavia. Although some aspects of the impact cases could be more convincing, the research group seems to have contributed to innovation and entrepreneurship in the High North.

Assessment of research group: 4 - very good

12.2.8 Feedback

While the department is doing well in terms of publication, it needs to focus more on publishing in top journals if it is to achieve its goal of becoming an internationally leading group in the area of innovation and entrepreneurship. It may also be advisable to diversify its sources of external funding to a greater extent. Finally, increasing efforts to recruit senior staff in the international market could be important for strengthening the department's scientific position.

12.3 Research group: Management, Accounting and Control for organisational adaptation in changing Environments

The research group Management, Accounting and Control for organisational adaptation in changing Environments (MACE) dates back to 1985 with a focus on accounting and management control, which subsequently developed into research particularly devoted to accounting in the public sector and in the context of public sector reforms. Particular emphasis has been placed on municipalities in Norway, but also in Russia and Ukraine. Later, based on the economic activities of multinational Norwegian firms, research on accounting and management control in international companies also became a focus, with particular emphasis on transitional economies.

12.3.1 Organisation, leadership and strategies

The MACE group is structured into four sub-profiles covering the following topics: (1) public sector accounting and budgeting reforms in Norway; (2) accounting and budgeting reforms in countries with transitional economies; (3) management control in turbulent business environments; and (4) management control in internationalised companies. While the research group has a clear focus, its sub-division into four topics appears rather high given the relatively small size of the core group. The

MACE group is led by a professor. The aforementioned sub-profiles are both clearly distinct and have a common core, i.e. accounting and management control. This contributes to coherence and mutual inspiration and learning among the group members.

MACE seeks high-level publications in combination with more practitioner-oriented forms of dissemination and places particular emphasis on the further scientific development of PhD candidates and postdocs. MACE's general goal is to improve understanding of how the design and use of accounting and management control systems can benefit adaptive organisations. For these strategic objectives (which are not that unique), the MACE group succeeds in fully employing a network of national and international partners, which is documented, for example, in several co-authorships.

MACE makes use of external funding to a remarkable extent, which, however, are clearly dominated by Norwegian sources (the RCN, public and private sectors). Some EU funding is present (in the context of mobility programmes) and, in this respect, some room for improvement is evident.

With its topical issues, MACE contributes to HHN's overall focus on 'entrepreneurship and innovation' for management control in turbulence and for adaptation) as well as on 'Research in the High North' (by addressing accounting/control in international companies with particular emphasis on Scandinavian and Northern countries). The publication strategy is in line with HHN's overall strategy.

HHN provides the core resources for research including, for example, the library and support from a central research administration – which, however, the MACE group thinks should be further expanded and which could help to increase external funding.

12.3.2 Research personnel

Researchers are recruited internationally, with, for early career researchers, a certain emphasis on Russia and Ukraine. This is reasonable given the geographical focus of the research group and matches its strategic focus. The hiring and career development policies appear to be in line with best practices in respect of openness, internationality etc.

PhD students, which are growing in number, and postdocs are supervised by, at least, two mentors. They are involved in the group's research activities and collaboration within MACE's networks. Feedback via internal seminars and at conferences form a regular part of the mentoring. In sum, the training and mentoring appears to follow high standards. The PhDs and postdocs are often recruited from overseas, through the group's strong international research network. Given the strategic focus of the group, this is a distinctive and appropriate recruitment approach.

With respect to gender, there is a slight imbalance in the composition of research personnel. The diversity in age is appropriate given the different academic levels of the group, and, with respect to nationality, there are some members from Russia and Ukraine, which is a result of the research topics.

Mobility in terms of exchange programmes is particularly encouraged at PhD level.

12.3.3 Research production and scientific quality

The MACE group has produced a considerable number of articles that were published in the most prestigious international journals in the domain of management accounting and management control. MACE studies topics (for example transitional economies and accounting in Northern countries), which are not the focus of mainstream research in management accounting and control, and this probably warrants for a particular profile and research originality.

Given its research topics, MACE has to rely on knowledge of other disciplines and, in turn, contributes to these. The domains of organisational science, regional studies or intercultural studies with their particular methods and theories can be mentioned in this context.

Overall, given its rather specific profile, the international visibility of its publication outlets and its interdisciplinary character, MACE's research quality is at a very high level.

12.3.4 Networking

MACE collaborates with national and international partners to advance its research strategy. The manifold forms include, for example, visiting professorships, joint supervision of PhDs and postdocs, co-authorships and joint applications for project funding.

12.3.5 Interplay between research and education

The MACE group is mainly involved in HNN's bachelor's programme and several programmes at master's level. In addition, it is engaged in PhD courses and in a double degree programme. MACE places particular emphasis on introducing new forms of teaching and encouraging students to engage in more critical reflection. Moreover, MACE's research publications are used as basic literature/syllabus in some courses at HNN.

12.3.6 Societal relevance and impact

MACE has conducted projects with obvious impact in an economic-societal sense (e.g. the establishment of the High North Centre for Business and Governance). The activities are documented in more practitioner-oriented outlets and seem to find their way into high-quality scientific papers. The description of the case HIGHNORTH elaborates on the impact of action-oriented research, also including Russian universities, that has led to the establishment of the centre. A significant outcome has been the development of several education programmes targeting the High North.

Given MACE's topical focus, its research contributions to the economy and society appear to be rather important – since management accounting and control is among the enablers for increasing the effectiveness and efficiency of the private and public sectors or for its multifaceted role in innovation and firms' adaptiveness to turbulence. This is documented in the impact cases PSAREF and DYNAMAC.

12.3.7 Overall assessment

Overall, MACE demonstrates a particular profile within management accounting and control that results from the specific subjects addressed by MACE: public sectors, transitional economies and turbulence / adaptiveness. The scientific quality of publications, PhD mentoring and collaborations are, overall, at a very high level. MACE contributes to HNN's overall strategic research issues and, with its focus on Northern countries; MACE significantly contributes to Economic-Administrative research related to Norway and the surrounding countries.

Assessment of research group: 4 - very good

12.3.8 Feedback

MACE has a clear focus which, moreover, provides a certain level of originality. A key aspect appears to be the recruitment of (young) researchers. Although the group seems to be rather concerned about recruiting and supporting its young researchers, there may be some room for improvement with respect to intensifying collaboration within the group, for example, by enhancing the frequency of group meetings.

13 Norwegian School of Sport Sciences

Norwegian School of Sport Sciences							
Units included in the evaluation of economic-administrative research	- Dept. for Cultural and Social Studies (SKS)			Listed researchers	9		
				Listed research groups	1		
				No. of researchers in listed research groups	10 (7 CVs)		
Other units of the faculty (institution)	- Dept. for Coaching and Psychology - Dept. for Physical Education - Dept. for Physical Performance - Dept. for Sport Medicine			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	0/0	0/0	0/0
				Total per year	0	0	0
				No. of positions announced / No. of qualified applicants per year			
					2014	2015	2016
Funding of the institution				PhD positions	2/ 9	-/-	1/5
Total expenditures	223 054	237 747	237 336	Post.doc positions	-/-	-/-	1/3
Types of funding				Permanent positions	1/3	-/-	-/-
Core funding from the RCN	182 790	210 109	247 731	Education			
External funding, RCN	9	1 505	365	Study programmes BA level - Bachelor Sport Science - Sport and Society (one-year study) - Sport, Culture and development cooperation (one-year study)			
External funding EU	2 130	1 460	5 371	Study programmes MA level - Master Sport Science - Master Sport physiotherapy			
External funding, other sources	27 545	25 896	28 419	Other			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

13.1 Economic-Adm. research at the institutional level

The Norwegian School of Sport Sciences (NSSS) is a specialised university for sport sciences, with 1,300 students, 250 staff, and 70 PhD students. Almost half of the PhD students and many of the ordinary employees are funded by non-governmental sources. NSSS performs extremely well in quality rankings for sports science institutions globally (4th of 400 internationally, 2nd in Europe, 1st in Norway).

13.1.1 Organisation, leadership and strategy

NSSS has a flat, two-level management structure, with an elected rector and pro-rector (responsible for research and education) and an MD (responsible for admin and resources) appointed by the board. There are five academic departments, two research centres and six administrative departments. Reflecting the institution's small size, planning, policy and administration are generally centralised.

NSSS is governed by a well-constructed 11-member board, including four external members appointed by the Ministry of Education and Research, four elected staff members and two elected student members. The democratic element is likely to improve staff confidence in the leadership team. Academic department heads make up a counselling committee for the rector. This is an effective way to ensure quality communication and informed decision making.

The principles of keeping staff numbers deliberately low, while focusing research on areas relevant to study programmes, enable this relatively small institution to build capacity by focusing on key areas of interest. Although its small size could be a weakness, the sharing of resources and cooperation across departments and disciplines, becomes a strength in relation to capacity building.

The strategic aims for research over the next five years are generic but bold. They include developing the research environment, building an international doctoral programme, seeking external funding, and developing strategic partnerships with leading international institutions. Five research areas are prioritised, with the flexibility to move extra resources to areas that require a short-term boost.

13.1.2 Institutional follow-up of previous evaluations

In 2011, NordForsk/the Academy of Finland rated research at NSSS as excellent, but identified differences in quality between different research areas. NSSS has focused on its recommendations, including to strengthen Nordic cooperation, increase multidisciplinary in projects, publish in higher-impact journals, maintain high-quality research on elite athletes and re-establish Nordic postgraduate training programmes. Social science was one of the highest rated areas in the evaluation. Since 2012, efforts to address the highlighted areas have included measures to increase publishing in high-impact journals. The longer-term success of this publishing initiative will to some extent rely on the institution's ability to increase the multidisciplinary of its projects.

13.1.3 Resources and infrastructure

Total expenditure was flat in 2015 and 2016, albeit with a small increase in staff costs. Core funding has increased in the past three years, with good growth in international funding. Overall, external research funding is good at around 14% of total expenditure. However, with expectations that core funding will decrease, the institution recognises that it will need to develop its strategy for pursuing external funding.

NSSS generally has good research infrastructure and facilities, with an upgrade of sports and office facilities due to be completed in 2017. There are seven state-of-the-art laboratories with well-qualified technical staff, with more labs planned. There are two specialised research centres: Oslo Sports Trauma Research Centre and the Norwegian Research Centre of Children and Youth Sports. Sports

facilities are very good, with continued improvements underway. An appropriate library and IT and research administration resources are in place.

13.1.4 Research environment

Departments are anchored in the research areas most relevant to the study programmes. Researchers form groups based on a common academic identity. NSSS has diverse international research partnerships, underpinning its research environment and research. All staff and PhD students are expected to engage in international collaboration. They receive support for longer stays at universities abroad, attendance at international conferences, international co-publications and participation in international research projects. The international focus is supported by the international staff profile and by the type of projects undertaken.

The institution's PhD programme was established in 1986 and is overseen by the Committee for Research Education (KFU), with professorial members appointed from each department and two student members. The balance of responsibility between KFU, which approves students, and the student's department, is appropriate. PhD students are fully integrated into departmental research, which is facilitated by the institution's small size.

The Department of Cultural and Social Studies proactively supports a good research environment, with regular research discussions and through some seed-corn money. The ability to attract external funding is excellent, with resources coming from a range of sources within Norway and beyond.

13.1.5 Research personnel

The male/female staff and student ratios seem reasonably balanced, with NSSS having 47% female employees. Women make up 60% of PhD candidates and 40% of permanent researchers. Forty-five per cent of students are women. Other ethnic backgrounds are well represented among staff and PhD candidates, with 22% from backgrounds other than Norwegian (compared to 16% for Norway as a whole). The percentage of students with an immigrant background is 4%, well below the Norwegian population level. NSSS routinely advertises internationally for new staff and provides practical support for those who relocate.

Arrangements for protecting staff research time are very good. Just under half of academic time is spent on research, with no distinction made between associate professors and professors. Protection of research time is also supported by the administrative burden being shared among staff, and by teaching time being concentrated at certain times of year. There are good sabbatical/study leave provisions, with the department head being responsible for arranging teaching cover.

No details are provided about mentoring/career support. The Department of Culture and Social Studies has recruited overseas adjunct professors to support research and publication activity.

A total of 161 candidates have completed PhDs since the programme was established, with 67 current students. The department has a modest number of PhD students reflecting its size (15 full-time staff, one postdoc and six PhD students), with stable completion figures. Two students in the department are relevant to the Economic-Administrative research area. NSSS offers funding for stays abroad to all PhD and postdoctoral candidates. No formal pathways are in place to support their career mobility, but the informal practice is that students benefit from the staff networks and can present at conferences, co-publish and benefit from research stays abroad.

All departmental staff must teach and carry out research. Up to 25% of PhD students' time is spent on teaching/supervision, which supports their academic development and integration into the department. Keeping the PhD numbers at the current levels ensures this level of integration. PhD

students contribute to improving the PhD programme through evaluations conducted by NSSS. NSSS does not currently have HRS4R status for HR Excellence in Research, but aspires to achieve this status.

13.1.6 Research production and scientific quality

The Department of Cultural and Social Studies focuses on sports management, in which it leads the field in Norway. This focus involves collaboration with colleagues within the department, whose research is focused on sports philosophy, sports history and sports sociology. Other prioritised areas that bring researchers with common interests together, preventing resources being spread too thinly, include event management, volunteering, gender perspectives and elite sport.

There is strong institutional research quality and productivity, good participation in international research networks, and research is produced at a high international standard that is highly relevant to society. NSSS demonstrates excellent performances in the quality rankings for sports science institutions and a strong performance in general research indices. The level of publication with international co-authors is very high. The publication points per researcher in the period 2014–2016 are the highest of any institution for the Economic-Administrative research area. The share of level 2 publications (books, book chapters and journal articles) is also well above the panel average. However, the share of level 2 publications for journals alone is somewhat below the average for this field. Although the publication and citation figures are very high, as sports management journals tend not to feature highly in international social science journal rankings, the institution is rightly seeking greater multidisciplinary in its work.

Impressive collaborations and networks with other researchers are evident, including sports management funding from the Norwegian Centre for International Cooperation in Education (SIU). Its Youth Olympic Games work has generated robust partnerships with other Norwegian institutions. These partnerships and the associated projects help support publication and have led to impressive impact, as shown in the Youth Olympic Games impact case study.

Funding is mainly from the Norwegian Government. Some funding comes from public and private sources in Norway, some from the EU, but little comes from the RCN. Given the social impact of the research, it may be possible to pursue more funding from the RCN and from the EU. The nature of the future funding balance is crucial to ensuring future sustainability and to building capacity.

Assessment of scientific quality: 4 - very good

13.1.7 Interplay between research and education

The links between sports management research and study programmes are strongly embedded at NSSS, and clearly in evidence at the department level. There are abundant opportunities for research to feed into teaching at all levels. The opportunities for undergraduate and postgraduate students to become involved in research are also good. Some students become involved as research assistants, while others write their master's thesis based on research projects at the institute.

13.1.8 Societal relevance and impact

NSSS sees itself as playing the leading role in developing sports science nationally, and acts accordingly in its networking and engagement. NSSS plays an active role in society by collaborating with a diverse array of national and international sports organisations, public bodies, private sector organisations and government bodies. Very strong knowledge exchange inputs are made through its connections with this wide range of non-academic stakeholders.

There is very strong evidence of the societal relevance and impact of research in the Department of Cultural and Social Studies, as shown by the level and quality of engagement with diverse public and

policy stakeholders. Substantial, tangible and impactful outcomes are demonstrated. A feature of the department's success is that knowledge exchange and impact provide the inspiration for the research projects, which are then incorporated into how the projects are delivered.

Impressive and diverse examples are shown of dissemination/knowledge exchange that involve a range of staff and PhD students. They include seminar programmes for various stakeholders, special issues, policy advice, practical involvement in sporting activities and participation at board level or equivalent in sporting organisations. No reference is made to the Norwegian Long-term plan for research and higher education.

The Youth Olympic Games case study describes research from the Events research group. A considerable body of research and credible outputs emerged from the project (including two books, published journal articles and reports). There is little doubt that this work had a major impact and directly contributed to Norway's successful bid for the Youth Olympic Games in 2016. Although the impact is clear, more detail could have been provided about the path to achieving the impact.

13.1.9 Overall assessment

Overall, the impression is very good. NSSS is undertaking high-quality research at national and international level, and it is highly productive and socially engaged. The relative scientific impact of its work is well above the average in this field for OECD countries, Norway and the Nordic region.

The institution's small size represents both strengths and potential weaknesses. So far, it has capitalised well from operating with a flat, democratic management structure, from building a strong cultural identity and from focusing on its research. The well-qualified, international academic staff show that NSSS is an attractive employment prospect for some of the best researchers in the field. These factors have come together to support high-quality, visible research and good productivity levels. The Youth Olympic Games impact case is impressive.

Reflecting its profile in sports management, NSSS has also been very successful in winning funding and in building strong networks. The quantity of outputs produced is high. A challenge for the institution is to improve the multidisciplinary of projects to increase opportunities to submit work to well-ranked journals in related areas of social science. The impact of the institution's work is particularly impressive, and it leads and participates in worldwide events and projects.

13.1.10 Feedback

The challenges it faces are as to be expected for a small institution, particularly in relation to balancing resources between research and teaching. Its success at generating research funding helps counteract these difficulties, but to counteract the effects of any future decrease in core funding, a detailed strategy will be necessary to support bids for external funding.

The continued pursuit of external funding, including extending areas of focus will be necessary to ensure that it is not overly reliant on a few large grants, and to reinforce longer-term sustainability.

NSSS should strengthen collaboration between researchers in different departments to improve the multidisciplinary of projects and support its aspirations to publish in better quality outlets.

13.2 Research group: Event – organization, management, volunteers

The research group Event – organization, management, volunteers in NSSS, is a modest-sized group that aims to build research expertise to support Norwegian bids for sporting events. Conducting research with socially relevant outcomes, the group is highly international in outlook and regularly collaborates with scholars beyond Norway.

13.2.1 Organisation, leadership and strategies

The group's strategy reflects the institution's strategic goals and those of the Department of Cultural and Social Studies, in which it is based. However, the self-assessment report focuses almost exclusively on the Youth Olympic Games (YOG) project, for which the group was originally established. Running from 2010–2017, the YOG project has been extremely productive in terms of outputs and the networks it has succeeded in building. Although the group also researches different aspects of mega events and volunteerism, the details provided offer little insight into the guiding strategies or aspirations beyond the initial reasons the Events group was set up. Since the majority of the group's current research is funded by NSSS, with only smaller amounts from other sources, this is an issue of concern. Almost half of the group's PhD students and many of its employees are funded by non-governmental sources. Careful consideration should therefore be given to the group's strategy and future sustainability beyond the initial objectives of the YOG project.

Very few details are provided about how the group is managed or whether specific governance arrangements are in place. The lack of clarity and omissions in some sections of the report make it difficult to gain a specific sense of the future strategy or trajectory of the group or to understand the guiding or future strategies for publication, knowledge exchange or building partnerships.

13.2.2 Research personnel

NSSS's research staff includes professors and PhD students from all over the world. The PhD programme is anchored at the institutional level. The board has delegated responsibility for the PhD programme to the Committee for Research Education (KFU). A PhD student is formally accepted by KFU, but receives an employment contract with a specific academic department. PhD students are fully integrated into departmental research activities and receive support to participate in international activities. NSSS funds stays abroad for all PhD and postdoctoral candidates. PhD students participate in research groups and utilise staff members' extensive networks.

NSSS has been very successful in recruiting researchers from other Nordic countries and internationally. The Events group has recruited several PhD students and one postdoc, indicating a modest contribution to recruitment and career development. Few details are given about the nature of any formal training for PhD students beyond details of their supervision. The PhD students and the postdoc in the group have been involved in international exchange activities.

The report mentions seven core members, although it is difficult to match these figures with the Table of Listed Members, which suggests that three of these members are on permanent contracts. The numbers raise some questions about the sustainability of the group in the longer term.

13.2.3 Research production and scientific quality

As an institution, NSSS has more publications and citations per researcher full-time equivalent than any other university in Norway. The Events group demonstrates very good research quality and productivity, high participation in international research networks, high visibility and participation in public debate, and substantial collaborations with both academic and non-academic institutions in

Norway and abroad. It has a very good level of publication, mainly in sport-related journals, ensuring the research has good visibility nationally and internationally.

The group's main contribution is empirical in relation to sports management, relating to its research to deepen understanding of the Youth Olympic Games. This research has generated a body of published work – two books and papers in sports management, sports sociology and sports policy journals. More limited claims are made with respect to theory development, centred around one group member's work that brings together psychology and sports management.

Sport science is an interdisciplinary field, and scientific staff cooperate in research and teaching across disciplines and departments. The institution's SWOT analysis suggests that the level of multidisciplinary work could be improved, which would help to increase publication opportunities in more high-impact journals in related disciplines. Following recommendations from the 2011 evaluation of the Nordic sport and exercise sciences research by NordForsk/the Academy of Finland, NSSS is seeking to improve its competitiveness by increasing publication in higher impact journals.

13.2.4 Networking

As an institution, NSSS is involved in a wide range of international research partnerships and has very good levels of collaboration and networking. Greater elaboration in the group's report on its guiding approach to collaborations would have made it easier to judge the likely trajectory and provided useful insights into the balance of the different types of collaboration it seeks. Examples are given of the impressive international and national collaborations emerging from the YOG research. These networks, which include scholars from Austria, Switzerland, Singapore, France, Canada, Norway, the US and Germany, have led to networking events and publications, including a journal special issue on the Youth Olympic Games.

13.2.5 Interplay between research and education

There is good evidence that research has directly led to the development and delivery of teaching. Contributions are made by group members at undergraduate and master's levels, with full-time staff members spending 50% of their time on teaching. Several of their publications are included in the curriculum and researchers deliver teaching based on their research. Undergraduate and master's students can take part in staff research, with some being involved as research assistants. At master's level, some candidates produce theses in areas connected to the research group.

13.2.6 Societal relevance and impact

Nationally, NSSS plays a leading role in developing sports science and is actively involved in collaborations with national and international sport organisations, foundations, businesses, public services, health care institutions, government bodies, policymakers and military organisations. These connections result in very strong knowledge exchange.

There is impressive evidence of the societal relevance and impact of research in the Department of Cultural and Social Studies, to which the group contributes. Very diverse and impactful examples of dissemination/knowledge exchange are demonstrated, ranging from seminar programmes and editing special issues, to policy advice, practical involvement in sporting activities and participation in sporting organisations. Although the group's report focuses exclusively on the YOG case study, a clearer picture of its impact is gained from the NSSS institutional report. There is no doubt that the YOG project was pivotal to Norway's successful application to host the 2016 Games and forms the basis for a strong impact case study that has been reviewed as part of the institution's submission. The impact case clearly shows the major impact of this work on Norway's bid for the Youth Olympic Games.

13.2.7 Overall assessment

Overall, the group is extremely productive, socially engaged and participates in diverse, extensive national and international networks. There is an impressive array of national and international research projects and a high level of publication. To further improve the impact of its publications, the group needs to become more multidisciplinary in its approach. The group currently seems to be heavily reliant on funding from the institution, which warrants attention. The need to build an institutional level strategy to support this activity is recognised, suggesting that central support is likely to be forthcoming.

Assessment of research group: 4 - very good

13.2.8 Feedback

To further improve the impact of its publications, the group needs to consider how it can become more multidisciplinary in its approach.

To ensure the future sustainability and growth of the group beyond current projects, a funding strategy is required that focuses on building different kinds of research income.

A programme for mentoring colleagues is required for both of the above areas.

14 Norwegian University of Life Sciences - School of Economics and Business

Norwegian University of Life Sciences, School of Economics and Business							
Units included in the evaluation of economic-administrative research	- School of Economics and Business (HH – NMBU)			Listed researchers	23		
				Listed research groups	1		
				No. of researchers in listed research groups	7 (6 CVs)		
Other units of the institution	Training, recruitment and academic positions						
		2014	2015	2016			
	No. of PhD graduated at the institution per year						
	Male/Female	2/0	0/1	1/0			
	R&D expenditures and sources of funding (1000 NOK)						
		2014	2015	2016			
Funding of the institution				PhD positions	3/54 (5)	4/67 (11)	4/67 (9)
Total expenditures	55 661	46 400	51 992	Post.doc positions	-/-	1/18 (5)	-/-
Types of funding				Permanent positions	6/55 (21)	-/-	2/26 (10)
Core funding from the Norwegian government	42 361	44 720	48 582	Education			
External funding, RCN	6 559	3 323	6 340	Study programmes BA level - Økonomi og administrasjon			
External funding EU	0	580	816	Study programmes MA level - Økonomi og administrasjon - Entreprenørskap og innovasjon			
External funding, other sources	4 562	5 304	3 011	Other No. of positions: Numbers in () refer to candidates deemed sufficiently qualified and called for an interview.			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

14.1 Economic-Adm. research at the institutional level

The Norwegian University of Life Sciences – The School of Economics and Business is one of seven faculties in the Norwegian University of Life Sciences (NMBU). It is a rather small faculty with only 31 staff members, but it is separate for AACSB accreditation purposes.

14.1.1 Organisation, leadership and strategy

The School of Economics and Business is governed by a board. The board is chaired by an external academic and has eight other members: two permanent members of staff, one temporary member of staff, two student representatives and two further external members. The daily operations are run by an executive committee consisting of the dean, the head of administration, the head of research and the head of education. Both the board and the dean report to the university rector. The staff members are divided into research groups with no formal management structure.

The aim of the School of Economics and Business is ‘...to be the leading institution for education and research in Norway within its profile, utilizing its strengths of being part of a university with a strong emphasis on environment and natural sciences, as well as ethics and social responsibility. Our research groups should be leading within their field of research in Norway, and be of high international standard. A good indicator will be a high level of publications in well-recognized international journals.’ For a small business school in a life science university, it seems appropriate to focus on issues related to the environment and natural sciences. It is also helpful that it indicates how research quality can be measured. However, many of the research groups are very small. The aim of all of these groups – to be leading in Norway and of high international standard – seems unrealistic. In that sense, the strategy does not provide much guidance to management.

Individual staff members collaborate with researchers at universities in Norway and abroad, and some of the groups have a good track-record of participation in EU-funded research projects. At the individual level, international cooperation is fostered through sabbaticals spent at universities abroad. The School of Economics and Business has extensive collaboration with the public sector. Research cooperation with the private sector is more limited, but the School of Economics and Business has started to recruit PhD students who work part-time in the private sector. Given that the business school has a mission ‘to develop and apply economic theory and methods – in combination with theories and methods from other social sciences, ethics, natural sciences and technology – as a basis for decisions on economically, socially and environmentally sustainable resource use at both the organizational and societal levels’, it would seem pertinent to engage more with the private sector in order to increase societal impact and the relevance of teaching.

The proportion of external funding was constant and at a relatively high level (20% of the overall budget) for the period 2014–2016, but there is some variation in the proportion of external funding from international sources. The proportion of external funding from the RCN was more than 50% on average for the period considered, making the School of Economics and Business vulnerable to cutbacks in RCN funding. EU funding constitutes between 0–2% of the overall budget in the period considered, and it is a goal for the business school to increase participation in EU projects. This would reduce its dependence on the RCN, and it thus seems an important goal to pursue.

14.1.2 Institutional follow-up of previous evaluations

Following up on the 2007 evaluation, the School of Economics and Business has implemented measures to increase publication output, also in leading journals. Furthermore, it has strengthened research in energy economics by hiring a permanent professor and a professor II working in this field.

14.1.3 Resources and infrastructure

The research infrastructure provided by the School of Economics and Business mainly consists of access to databases.

14.1.4 Research environment

The research at the School of Economics and Business is organised in rather small research groups (2–6 staff members plus PhD students). The narrow focus of the groups leads to coherence, but some of the groups appear to lack the critical mass to have an active research environment with common activities and a diversity of skills and interests. The small groups and the associated limitations may also be an obstacle to international recruitment and to bidding for external projects. Furthermore, as noted in the SWOT analysis, the small groups are vulnerable to the departure of members. Another issue mentioned in the SWOT analysis is the limited collaboration within the faculty.

14.1.5 Research personnel

The School of Economics and Business does not expect to expand in the coming years. Hence, most of the recruitment will fill vacancies arising due to retirement. The faculty has a recruitment plan based on the current composition of the staff, teaching needs and research priorities. New positions are advertised openly, and the business school has exclusively recruited researchers with PhDs from other universities in Norway or abroad over the past eight years. However, the School of Economics and Business has experienced problems finding candidates for positions in some areas. International recruitment has so far primarily been at junior levels, PhD students and postdocs. Focusing greater attention on international recruitment at senior levels could be a way of improving and expanding the pool of candidates for the positions.

The School of Economics and Business has invested in improving PhD training. Efforts have been made to ensure a good match between student and supervisor, and introductory courses are provided to help PhD students get started. The research training is nonetheless limited by international standards, and there seems to be scope for improving PhD education by offering a more structured programme. Finally, PhD students have gained better possibilities to earn a fourth year of doctoral studies, which is likely to improve the PhD candidates' possibilities to compete in the job market.

At this stage, the business school has not attempted to obtain 'HR Excellence in Research' status, and there is no plan to do so.

The School of Economics and Business encourages PhD students to spend a period at another university, and most of them do so. This can be an important part of PhD training as it allows PhD students to experience a different research environment and to follow specialised PhD courses. It is not clear from the self-assessment report whether the business school offers financial support to PhD students going abroad. As another scheme to increase mobility, tenured staff can apply for a sabbatical year and spend it at another university. They can apply for funding to cover extra expenses, and the funds are allocated competitively according to their recent research output and research plans for the sabbatical.

The gender balance is skewed at the School of Economics and Business, but the proportion of female staff members is similar to that of the overall panel. The business school applies a 'gentle' affirmative action policy whereby the female candidate is hired if a male and a female candidate are about equally qualified. The School of Economics and Business has a scheme in place to help female associate professors become full professors. Furthermore, there is a policy of protecting the research time of female associate professors, and they are granted sabbaticals more often than other permanent staff

members. Perhaps as a result of these policies, the gender balance is improving. Out of the last ten recruitments to permanent positions, five were women. The proportion of female PhD students has also increased in recent years.

14.1.6 Research production and scientific quality

The School of Economics and Business supports staff members' research efforts by trying to concentrate teaching in one semester. The school also has an explicit goal of 1.3 publication points per year per researcher. Each staff member meets with the dean once a year, and publication output is an important item at this meeting. Focusing on publication points may ensure research activity, but it does not necessarily foster research excellence. The issue is that the publication points do not reflect the additional effort, time and risk involved in publishing in top journals compared to lower ranking journals.

Turning to research output, the number of publication points per researcher at the business school is below the Norwegian average for the panel. In terms of quality, there seems to be important differences within the school across panels. Looking at the School of Economics and Business overall, there is a high proportion of publications in top 10 journals, and the share of level 2 publications is close to the national average. Looking at the Economic-Administrative panel alone, there are very few level 2 articles. Among the book chapters, which are few relative to articles, the share of level 2 publications is higher. The research impact at the School of Economics and Business as measured by citations is very similar to the averages for Norway and the Nordic countries, but is slightly below the OECD average for the panel. The proportion of publications with international co-authors is lower than the national average for the panel. Taken together, these numbers suggest the following:

- Research productivity at the School of Economics and Business is somewhat below the national average for the panel.
- Economic-Administrative research at the School of Economics and Business is less international and is published in lower ranking journals than the national average for the panel.
- Economic-Administrative research at the School of Economics and Business is very rarely published in the best journals.

The papers submitted are of high quality and published in good international journals. This is also indicated by the fact that all articles, but one, are published in level 2 journals. Most papers are published in leading field journals or second-tier general interest journals in economics. Furthermore, two of the papers are multidisciplinary in nature and are published in leading multidisciplinary journals.

Assessment of scientific quality: 1 - weak

14.1.7 Interplay between research and education

The School of Economics and Business has bachelor's and master's programmes in business administration and economics, which most research groups contribute to. There is also a more specialised programme in entrepreneurship and innovation that only involves two research groups. Other than that, the self-assessment does not contain reflections on how research feeds into the teaching programmes. As is usually the case in social science, students are primarily involved in research when they write their master's thesis.

14.1.8 Societal relevance and impact

The School of Economics and Business has no explicit strategy for dissemination, user-involvement and knowledge exchange. Rather, dissemination seems to be carried out in an 'ad-hoc' manner, as and

when requests for such engagement are raised or opportunities arise. This does not seem in line with its mission to improve economic decision-making in society.

The impact cases concern work by research groups submitted to the economics panel. For this reason, these cases will be assessed by the economics panel.

14.1.9 Overall assessment

The School of Economics and Business has a strategic focus on issues related to the environment and to natural sciences, which are natural choices for a business school in a life science university. Overall, Economic-Administrative research at the School of Economics and Business seems weak. Research productivity and quality are below the national averages, and very few level 2 articles are published by researchers at the business school. The School of Economics and Business hires staff externally at junior levels, but there is scope for more international recruitment at senior levels. Research at the business school is conducted in small research groups, which may not provide the best possible research environment. The group sizes may also be an obstacle for fundraising and international recruitment. Recent efforts have been made to improve PhD education, but the business school still offers little internal research training. The School of Economics and Business's mission is to improve economic decision-making in society, but it lacks a dissemination strategy to support this goal. Researchers at the business school have close interaction with the public sector but relatively little interaction with the private sector.

14.1.10 Feedback

The quality of research in the Economic-Administrative area needs to be improved. Special attention should be given to increasing the proportion of articles published in level 2 journals. Most of the recommendations presented below aim to address this challenge:

- i) Formulate a research strategy that is more operational and based on the current strengths of the School of Economics and Business.
- ii) Formulate a strategy for dissemination and engage more with the private sector in order to improve the relevance of teaching and economic decision-making in society.
- iii) Increase the size of the research groups in order to improve the research environment and to facilitate international recruitment and fundraising.
- iv) Organise faculty-wide activities in order to compensate for the School of Economics and Business's modest size.
- v) Help female assistant professors to further their careers.
- vi) Hire in the international market also at senior levels in order to improve and expand the pool of candidates for positions.
- vii) Offer a more structured PhD programme with a greater focus on research training.

14.2 Research group: Commodity Market

The research group Commodity Market focuses on commodity markets such as energy, seafood, agricultural commodities etc. The group consists of three professors, two associate professors and three PhD students. In addition, there are also three associate members, two from elsewhere in the university and one from UiT The Arctic University of Norway.

14.2.1 Organisation, leadership and strategies

The group aims to provide a platform for commodity research and to combine strong competencies in finance and in market analysis. The group complements the research and teaching activities of NMBU well, and it has received financial support from the university board since its establishment in 2012.

While it is natural that the focus has initially been on start-up activities and building a network, the group seems to lack a clear strategy to guide its activities and decisions going forward. It would be useful to formulate a more specific strategy regarding important issues such as: what are the ambitions in terms of publication, teaching, external funding, recruitment and dissemination, and how are these ambitions to be reached?

The group has quite quickly established a profile in commodity markets research by organising international conferences and workshops and by participating in the launch of the Journal of Commodity Market Analysis. The group is also involved in doctoral training, and it has organised three workshops in collaboration with the National Research School in Business Economics and Administration.

Until now, the group has primarily been funded by the university, but the group has recently started applying for EU funds. The need to develop and diversify future funding is likely to require the group to build experience and capacity accordingly.

14.2.2 Research personnel

The group is active in doctoral training, and it has recruited seven PhD students in four years. Four of these PhD students are from abroad. The PhD students participate in weekly seminars and workshops, and several of the PhD students have spent time at a leading university abroad. The organisation of the PhD students' formal training is not explained. Their networking with non-academic partners is more limited.

The CVs show that the group has been able to attract an associate professor with a PhD from a leading European university. There is only one female staff member of the group, and the gender balance is more skewed than the panel average.

14.2.3 Research production and scientific quality

Overall, the research group is productive, and the members publish their research in different types of outlets: reports, books and peer-reviewed articles. The submitted papers are of good quality. They address clear research questions and show good command of the relevant methods. At the same time, some of the papers address somewhat narrow research questions. This is also reflected in the ranking of the journals: only one of the papers submitted to the evaluation is published in a level 2 journal. The submitted works also include a report on how imposing social responsibility requirements affect the return on the investments made by the Government Pension Fund Global.

The group has provided important input to the debate on whether food prices have become erratic due to speculation.

In summary, this is a productive research group where the members publish books, reports and peer-reviewed articles. The submitted papers look at relevant issues and are of good quality, but the proportion of articles published in level 2 journals is low.

14.2.4 Networking

The group has built up an international network, and members of the group have been involved in organising international conferences and in launching the first international journal on commodity

markets. While the members of the group often work together, several of the members also co-author papers with researchers at other universities in Norway and abroad.

14.2.5 Interplay between research and education

Members of the group run a master's course on commodity market analysis and supervise master's theses. Nearly 50 students are enrolled in the course, and students are actively involved in conducting their own research on a particular commodity as part of the course.

14.2.6 Societal relevance and impact

The reports published by the members of the group are likely to inform policymakers and to affect their decisions. However, as no impact case was submitted, this is difficult to judge. The group informs the general public about commodity markets through its presence in popular media, and it has started to interact more frequently with industry participants.

14.2.7 Overall assessment

This is a productive research group that studies a topic of strategic importance to NMBU and of economic importance to the Norwegian economy. The members regularly publish reports, books and papers in international peer-reviewed journals. However, level 2 publications are rarer. The members are also quite active in the public debate on commodity markets.

Assessment of research group: 2 - fair

14.2.8 Feedback

The panel recommends that the group articulates a clearer strategy for how it wants to develop in future, including the next steps in relation to future funding and publication in higher ranking journals.

15 Norwegian University of Science and Technology, Faculty of Economics and Management

Norwegian University of Science and Technology, Faculty of Economics and Management							
Units included in the evaluation of economic-administrative research	- NTNU Business School (HHS) - Dept. of International Business (IIF) - Dept. of Industrial Economics and Technology Management (IØT)			Listed researchers	160		
				Listed research groups	1		
				No. of researchers in listed research groups	18 (25 CVs)		
Other units of the faculty (institution)	- Dept. of Economics (ISØ)			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	5/2	4/2	6/0
				Total per year	7	6	6
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year			
	2014	2015	2016				
Funding of the institution				PhD positions	5/22	8/72	13/24
Total expenditures	189 519	194 283	207 084	Post.doc positions	2/8	4/12	6/8
Types of funding				Permanent positions	10/66	6/17	3/7
Core funding from the RCN	155 466	161 147	174 403	Education			
External funding, RCN	22 597	21 436	20 486	Study programmes BA level Marketing and Management, Accounting and Auditing, Business Administration			
External funding EU	0	0	365	Study programmes MA level Industrial Economics and Technology Management, Safety, Health and Environment, International Business and Marketing, Management of Technology, School of Entrepreneurship, Project Management, Public Administration (MPA), Business Administration			
External funding, other sources	11 456	11 700	11 830	Other There are also two Ph.D. programmes under this panel: - Management accounting and control - Industrial Economics and Technology Management			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

15.1 Economic-Adm. research at the institutional level

15.1.1 Organisation, leadership and strategy

The Norwegian University of Science and Technology (NTNU) includes eight faculties and the NTNU University Museum. The main profile of the university is in science and technology, with a full range of academic disciplines. NTNU established the Faculty of Economics and Management on 1 January 2017 with units from NTNU, the Faculty of Social Science and Technology Management and the university colleges of Sør-Trøndelag, Ålesund and Gjøvik. The Faculty of Economics and Management has four departments, where three departments are relevant to this evaluation.

The faculty has a unified leadership model with a dean and three vice-deans for research, education and continuing and further education. The vice-deans run the day-to-day business together with the heads of departments. The Faculty of Economics and Management has several advisory bodies that provide advice to and increase the knowledge of the leadership (information sharing). This governance structure is traditional and has the advantage that the responsibilities are clearly distributed. One issue with the structure is how the staff are to be engaged in strategy development.

The faculty currently has no strategy plan in place because of the recent mergers. However, it is stated that a strategy plan is under development. Two of the departments at the Faculty of Economics and Management, one under this panel (IØT), is committed to the pre-merger strategy of the old Faculty of Social Science and Technology Management. Its research strategy included three priority areas: to increase the number of research groups at a high international level, a strong involvement in NTNU's strategic research areas, and high quality in all research activities. These priority areas have been followed up in 2015 and 2016 through the specific allocation of funding to research groups at the faculty level, better funding for sabbaticals abroad, recruitment to specific research positions and increased administrative support. While most goals and measures have an international focus, it is less a strategy plan, but more a list of goals and efforts with limited internal consistency.

Over 80% of the funding is core (and fixed) funding from the Norwegian Government. External funding is mainly from the RCN and from private sources in Norway. International funding is very low and does not correspond to the general international ambitions as formulated in NTNU's International Action Plan 2014–2017. From a budget risk point of view, diversity in funding sources would also be an advantage.

15.1.2 Institutional follow-up of previous evaluations

Not relevant.

15.1.3 Resources and infrastructure

There is a high level of access to relevant databases at the library. The faculty also has two laboratories (computational economics/optimisation and health, security and environment) for experimental research, indicating a high level of research infrastructure and that the necessary resources are available. The faculty also provides administrative support to research groups.

15.1.4 Research environment

There is a focus on providing incentives for spending sabbatical semesters at foreign universities and research units. There are also measures in place to promote international collaboration. The faculty has organised a compact international PhD course in stochastic programming, every other year since 2011, with a total of 400 students participating from 50 universities.

15.1.5 Research personnel

NTNU signed the European Charter and Code for Researchers in 2008. The faculty follows NTNU's Human Resource Strategy, which is a commitment to the implementation of the European Charter and Code. The strategy contains actions to stimulate both incoming and outgoing mobility, recruitment and career development, as well as the career development of female academic staff. In fact, the Faculty of Economics and Management at NTNU has developed some interesting and concrete actions to improve the gender balance.

The faculty basically has one career path for researchers. There is another option that has a greater focus on education and teaching; but it is not a path that is signalled and prioritised.

The Faculty of Economics and Management recruits internationally, but it is not very clear how the recruitment process is run, i.e. whether more is done than simply advertising the position internationally. The number of applicants to vacant positions is not impressive.

Both incoming and outgoing mobility is stimulated to increase internationalisation. Again, some concrete actions have been formulated, which have not been very successful for the incoming mobility, while the outgoing (sabbatical) is working better.

The number of PhD students is on average not very high per department, and developing a common PhD programme across the faculty for the first year, before the students specialise, could be considered. The PhD programme includes a longer stay at an international research environment for 1-2 semesters which is evaluated to be central to the quality of the programme.

15.1.6 Research production and scientific quality

The research quantity and quality differs greatly across the three departments at the new faculty. The Department of Industrial Economics and Technology Management is a well-established department with very high quality in selected areas, while the other two departments, NTNU Business School and the Department of International Business are clearly under development and of a lower international standard.

Assessment of scientific quality: 3 - good

15.1.7 Interplay between research and education

The time-split between teaching and research at the Department of Industrial Economics and Technology Management is balanced and can be compared with international standards. However, the time allocated to research at NTNU Business School and the Department of International Business is much lower, and the staff at these departments cannot therefore be expected to reach international standards in their disciplines, if they are not allocated more research time.

For two of the departments, Industrial Economics and Technology Management and International Business, there are established links between research and study programmes. However, such a link is not as clear for NTNU Business School.

The Department of International Business and NTNU Business School involve master's students in their research activities on an ad hoc basis, while the Department of Industrial Economics and Technology Management has developed a model for how students are to be involved in research projects during their master's degree educations.

No major challenges have been identified.

15.1.8 Societal relevance and impact

Several dissemination activities take place and the departments have focused on this element of knowledge exchange and impact. In particular, the Department of Industrial Economics and Technology Management has been successful in involving stakeholders in research and real impact has been achieved, whereas the other two departments' knowledge activities have been more traditional.

The departments conduct research activities in the Norwegian Government's priority areas, mainly in sea and oceans, climate, environment and clean energy, technology and innovative business.

The impact cases submitted demonstrate the Department of Industrial Economics and Technology Management's focus on demonstrating the relevance of their research and on disseminating their knowledge to decision-makers and stakeholders.

In the 'decarbonizing' case, reports were produced in cooperation with stakeholders and the results were presented to politicians in various countries. It is stated to have had an impact on the formulation of the EU's energy policy, but this is not explicitly demonstrated. The 'GassOpt' case shows how the application of an optimisation tool developed together with SINTEF has led to significant cost savings in the oil sector, a significant impact of research. 'NTNU Innovation Factory' is a set of collaborative research projects together with the industry. Conducting research that the industry finds interesting has high impact. The 'Lean in Norwegian' case is based on several externally funded projects that enabled connection to a lean management industry network in Norway. The research produced in the projects was disseminated to the industry via the network. Finally, the case of 'the economics and business of sport and sporting events' is not really an impact case, but more a description of knowledge dissemination activities. The amount of activity is high, but standard.

15.1.9 Overall assessment

The recent merger has resulted in three very different departments in terms of research quantity and quality. While one of the departments is very well established and has developed research areas that follow international standards, the other two departments have a much lower standard of research.

The recruitment strategy is weak and active efforts may lead to a better list of applicants. The three departments have their own PhD programmes, which could be merged into one PhD programme to secure the quality.

Teaching time is relatively high at two departments, which may explain the lower research output at these two departments.

15.1.10 Feedback

The faculty has undergone a recent merger between three different institutions with different backgrounds and traditions. The results of the self-assessment are therefore not surprising. However, clear leadership and a strategy plan are needed that can bring about the necessary increase in the whole faculty's overall research quality within the next 3–5 years. Since IØT is the leading department of international standard, this department could take the lead in such a process. One strategy choice will be whether to accept a higher teaching base at some departments and only invest in research activities in one or two departments. This might be the best strategy given the limited funding resources.

15.2 Research group: Computational Economics and Optimization

The research group Section for Managerial Economics, Finance and Operations Research (Computational economics and optimization) was established in 2006 within the Department of Industrial Economics and Technology Management. The size of the group has grown from about seven in 2006 to 11 permanent employees today.

15.2.1 Organisation, leadership and strategies

There are four senior professors who each cover their specialised methodological area and together act as heads of section/research group. It is not clear, who actually hires personnel and is hence responsible for staff development. The members of the section meet each month to discuss research, applications, seminars and other matters. However, co-location makes the daily and informal contact as important as these meetings.

The section has an interesting vision with clear connections to societal challenges and very high ambitions with respect to publications and external funding both in terms of quantity and quality.

15.2.2 Research personnel

The group is actively involved in recruitment via their network with around 60% of the recruited PhD students coming from abroad. The recruitment procedure for assistant professors and tenure staff is not described.

All PhD students are encouraged to spend a half-year to one year abroad at another university. Postdocs are encouraged to arrange shorter international stays. The aim is for the temporary staff to work in partner companies or in research institutes such as SINTEF or IFE. Often these cooperation arrangements with a PhD student or postdoc, while they are at NTNU, develop into employment offers from these companies. One could argue that such a high-profile research group should also educate PhD students to be competitive in the international academic job market and place a larger proportion of their PhD students in academic positions.

The gender balance of the research group is male-biased and around half of the researchers are recruited from NTNU. There is thus room for improvement in the gender balance. The international dimension is, to some extent, represented by younger members of the group.

15.2.3 Research production and scientific quality

The research group conducts research in techno-economic modelling and optimisation and has three methodological areas (discrete optimisation, stochastic programming and real options analysis) and two broad application areas: energy markets and systems, and maritime transportation. The research challenges and contributions to date are described in a convincing and interesting way. It could however be questioned, whether a total of five research areas is too many for a group of 11 researchers.

The section's research output seems to be of a high quality. However, not all of the 18 submitted publications had precise bibliographical information and were thus more difficult to assess.

15.2.4 Networking

The section has an extended international network with high-ranking universities, and research stays are encouraged at these universities. The group is involved in arranging PhD courses and participates extensively in several research centres with other partners.

They also collaborate with the industry and business on research projects and invite firms to workshops and stakeholder meetings around four times per year.

15.2.5 Interplay between research and education

The members of the group teach at master's level – a total of 12 courses, two other courses plus 2-3 PhD courses per year, which, at an overall level, is not an extensive burden. The teaching is within the group's specialisation. There could be a potential to let the group members offer more basic courses within their scientific area.

15.2.6 Societal relevance and impact

The section has an extended cooperation with the business community and organises a range of knowledge exchange activities, e.g. workshops and newsletter. A limited number of PhD and postdoc projects are co-financed by the private sector.

The submitted impact cases 'decarbonizing' and 'GassOpt' both show how research output from the section has been applied in the policy process and by the business sector. In the case 'decarbonizing', reports were produced in cooperation with stakeholders and the results were presented to politicians in various countries. It is stated to have had an impact on the formulation of the EU's energy policy, but this is not explicitly demonstrated. The case 'GassOpt' shows how the application of an optimisation tool developed together with SINTEF has led to significant cost savings in the oil sector, a significant impact of research.

15.2.7 Overall assessment

The section has a clear profile and research agenda. However, consideration could be given to whether it is too broad. The strategy is ambitious, and it has been implemented in some areas (e.g. PhD education), while in other areas the strategy has yet to be implemented (e.g. external funding beyond the RCN). In general, the group is of a high scientific level.

Assessment of research group: 4 - very good

15.2.8 Feedback

The section could possibly focus on fewer research areas to reach a higher international standard. This will require prioritisation and highlights the need to develop an active and goal-oriented recruitment and funding strategy.

16 Oslo and Akershus University College of Applied Sciences, Faculty of Social Sciences

Oslo and Akershus University College of Applied Sciences, Faculty of Social Sciences							
Units included in the evaluation of economic-administrative research	<ul style="list-style-type: none"> - Oslo Business School (HHS) - Public Management (OAL) 			Listed researchers	34		
				Listed research groups	0		
				No. of researchers in listed research groups	0		
Other units of the faculty (institution)	<ul style="list-style-type: none"> - Archivistics, Library and Information Sciences (ABI) - Journalism and Media Studies (JM) - Social Work, Child Welfare and Social Policy (SF) 			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	-/-	-/-	-/-
				Total per year	-	-	-
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year			
	2014	2015	2016				
Funding of the institution				PhD positions	-/-	-/-	-/-
Total expenditures	219 494	232 337	258 554	Post.doc positions	-/-	-/-	-/-
Types of funding				Permanent positions	-/-	-/-	1/9
				Education			
Core funding from the RCN	193 293	206 226	230 244	Study programmes BA level			
External funding, RCN	7 768	9 009	10 694	Facility Management Rekneskap og revisjon Økonomi og administrasjon			
External funding EU	17	290	112	Study programmes MA level			
External funding, other sources	4 623	7 161	7 857	Styring og ledelse Økonomi og administrasjon - siviløkonom			
				Other (årsstudier) Kulturledelse Organisasjon og ledelse Økonomi og ledelse			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

16.1 Economic-Adm. research at the institutional level

Oslo and Akershus University College of Applied Sciences (HiOA) has four faculties: Health; Teachers' Education; Technology, Art and Design; and Social Sciences. There are two social science research centres: Centre for Study of the Professions and Centre for Welfare and Labour Research. Previously an education-focused institution, the development of research at HiOA is relatively recent. HiOA has recently achieved university status, which it hopes will help to attract international staff.

16.1.1 Organisation, leadership and strategy

The development of research at HiOA is relatively recent. Following a review in 2014 by the Nordic Institute for Studies in Innovation, Research and Education, a new governance and management model has been established to reflect new norms for the sector in Norway. The new structure aims to improve coordination between teaching and research, and is part of the changes made in relation to HiOA's application for university status. There are five departments in the faculty, and it also has responsibility for administering the inter-faculty School of Management. There is good consistency in management structure between the faculty and the institution, with similar coordination between research and teaching.

The faculty's strategic objectives are broadly aligned with the intention to build research. Priorities include developing research that closely fits the education agenda, focusing on areas in which leadership in the national/Nordic context can be demonstrated, seeking strong international and national research collaborations, and improving publication and funding levels. However, some of the objectives may be overly aspirational at this stage in the development of research, and a clearer sense of the steps towards these aspirations is needed. For example, in order to increase publication and funding to match similar Norwegian research environments, a clear process will have to be established and closely monitored. Ensuring good connections between the research priorities and areas of teaching activity will also be crucial, to show the value of research to the institution.

Research personnel costs are increasing in line with other personnel at the institution, with modest growth over the past three years. Core government funding has also increased. External funding makes up a relatively small proportion of the funding model, running at slightly under 10%.

The developments in process suggest that positive steps are being made to improve research quality. HiOA's connections with policy and practice put it in a good position to develop interdisciplinary research based on societal challenges.

The issues it faces in relation to commitment to research and the mandate for research leaders are typically faced by education-focused institutions seeking to develop their research profile. The main challenges include the low levels of internationalisation and external funding, both of which could threaten the longer-term sustainability of a good research environment. Spreading resources too thinly over too many research areas could also be problematic, so a clear focus needs to be maintained on the areas with the strongest capabilities.

16.1.2 Institutional follow-up of previous evaluations

Since 2013, research groups have been established within priority areas, so this is still at an early stage for evaluation. The recent external review of research groups reported positively on how the implemented approach is supporting a stronger research culture. The review also made recommendations about the need for fewer research groups, clearer goals, greater inter-departmental collaboration, stronger formal commitment to research and a clearer mandate and training for research group leaders.

An evaluation of sociology at HiOA in 2010 revealed similar issues to the more recent review. The needs for stronger recruitment, greater focus, better publishing and strengthening priority themes in the PhD programme were specifically mentioned. Since then, some steps have been taken to increase open recruitment (including internationally) and some support for improving publishing has been put in place. Although these steps are useful, wider-ranging changes could have a bigger impact. In particular, allocating research time to researchers is what really matters, so recruitment and protecting research time are first-order concerns. Further ways of supporting international collaboration, that go beyond international recruitment, are also warranted.

16.1.3 Resources and infrastructure

The SWOT analysis suggests that the available resources for research are lower than that found in 'old' universities. The funds available for sending PhD students on international visits are limited, and there can be challenges relating to protecting staff research time.

Research personnel costs are increasing in line with other personnel at the institution, with modest growth over the past three years. Core government funding has also increased. External funding, which is likely to be important in increasing resources for research and ensuring its sustainability, makes up a relatively small proportion of the funding model (less than 10%).

Appropriate library and IT resources are in place. Administrative support includes five research advisors and specific cover for EU funding is included, which is positive.

16.1.4 Research environment

The research environment is improving over time, although this is still work in progress. There are relatively few options for providing staff with uninterrupted research time, but there is a desire to tackle this issue. Attracting more external research funding could be part of the solution.

The faculty has a scientific forum for regularly sharing research ideas and outputs. National and international networks need further development. It is less clear to what extent researchers are able to routinely engage and collaborate with researchers elsewhere.

16.1.5 Research personnel

The researchers whose research is within the scope of this panel are mainly located in Oslo Business School, which is managed under the Faculty of Social Sciences. There has been very limited growth (one post only) within the research discipline over the past three years. It is difficult to see how the plans for an additional four associate professors over the next 2-3 years will be sufficient to support the growth of the discipline. External funding is the most likely route for ensuring the necessary growth and creating an academic environment with a critical mass of researchers.

The time devoted to research is in line with what might be expected (average of 33%; 45% for professors). Although time is allocated for project acquisition, this seems to fall within these allocated amounts. Limited provision is in place for one staff member per semester to take research leave abroad. However, individuals must make their own arrangements for teaching cover, which is not ideal.

Measures are in place to support equality of opportunity and to use gender-neutral criteria in relation to wage policy. There is a strong and routinised mentoring programme for staff, with provision to support female candidates. In a recent promotion round, 10 out of 11 candidates were female.

Practical steps have been taken to encourage international recruitment, both in assessing the suitability of posts for overseas candidates and in supporting those who relocate to Norway. The extent to which these steps have generated more overseas candidates is less clear.

Although a PhD programme was launched at HiOA in 2005, the programme does not yet include students whose work is within the scope of the Economic-Administrative panel. The development programme for these PhD students seems rather generic, with a small input of more specific training once each semester. PhD students only have limited possibilities to visit leading universities abroad and take courses there. Overall, there is some evidence that resourcing to support these students may not have kept pace with the expansion in numbers. There do not appear to be any plans to implement a programme for PhD students in Economic-Administrative research, which is a serious issue that will make it harder to recruit strong senior researchers to the school.

HiOA was awarded HRS4R status for HR Excellence in Research in 2016.

16.1.6 Research production and scientific quality

The narrative refers to HiOA as a ‘mature’ research institution, whereas the impression created is of an institution that is in the process of improving its research quality. Appropriate initial steps are in place to improve the research quality of recruited staff, with international recruitment a priority. The institution is proactively seeking international networks for staff to join, although the contribution that can be made to these networks will need to be made clear to external partners. The effectiveness of this strategy will need to be monitored over time.

The research is characterised by its connections with practice. This can be an effective way for education-focused institutions to expand their research portfolio and effect impactful dissemination. The research topics covered by each of the two research groups – Economics and Finance (FINANS), and Professions and Management (POL) – seem broadly appropriate. There are a few co-authorships of papers with researchers elsewhere in Norway, but the number of international co-authorships is low compared to the panel average, which reinforces concerns about internationalisation. The publication points per researcher in the period 2014-2016 are slightly below the average for Economic-Administrative research. The share of level 2 publications (books, book chapters and journal articles) is also slightly below the panel average. However, the share of level 2 publications for journal articles alone is average for this field. There are slightly fewer publications in top 10 journals; however, the faculty does publish in the very best journals from time to time. In terms of research production and scientific quality, the submission is not far from average, which suggests there is a reasonable basis on which to build for the future.

With low basic funding, external funds may be the only way of developing critical mass, yet funding applications are low. Having access to such funded projects would naturally improve networking opportunities and increase the opportunity for impactful work. This is an issue to consider.

Assessment of scientific quality: 2 - fair

16.1.7 Interplay between research and education

Building on the traditionally strong relationships between teachers and students, there are good connections between research and study programmes at both undergraduate and master’s levels. Master’s students are involved in some aspects of staff research, although the lack of a PhD programme within the Panel 6 area is problematic. The provision of grants to master’s students who collaborate on their dissertations with a research group member helps to reinforce the commitment to involving students in staff research.

16.1.8 Societal relevance and impact

A main concern is the lack of external funding for projects, although researchers are working in areas that potentially have good societal relevance. Researchers in the two groups mentioned are focusing on priority areas from the Long-term plan for research and higher education (priority area 5, innovative and adaptable industry).

The faculty is involved in the institution's wider research dissemination platform SAMSVAR which holds regular seminars for stakeholders from policy and practice. A mix of dissemination examples is provided, mainly academic lectures or contributions to media of one sort or another. Overall, it is more limited in scope than it could be. No mention is made of social media, which is an issue to address to ensure impact beyond academia.

16.1.9 Overall assessment

The issues faced in relation to commitment to research and the mandate for research leaders are typical of those faced by education-focused institutions when developing their research profile. The main challenges relate to low levels of internationalisation and low levels of external funding. Both could threaten the longer-term sustainability of a good research environment. Spreading resources too thinly over too many research areas could be problematic, so a clear focus will be needed.

There is some good publishing quality, but a shortfall in external funding and no PhD programme. The impact of research within Norway is good. However, details about external networking are sparse and the level of internationalisation is low. Greater focus could be placed on some aspects of non-academic impact.

Overall, the institution is making positive steps to improve the research environment and to ensure research is more central to its activities. Improvements pursuant to well-defined benchmarks will need to be rigorously monitored to ensure the desired progress is made. Securing university status will be an important step in this journey.

16.1.10 Feedback

A focus is needed on winning external funding from a variety of sources to increase the resources available for research and to support future growth. With low basic funding, external funds may be the only way to expand and create an academic environment with a critical mass of researchers.

Continued attention is needed to improve the internationalisation of staff, networks, projects and publishing.

The lack of a PhD programme relevant to Economic-Administrative research will have wider implications for the opportunity to recruit strong senior researchers. This is a serious issue that will have to be addressed, if the research profile in the discipline is to improve.

It is important to ensure that resources are not spread too thinly by continuing to focus on the areas with the strongest capability, to help protect the longer-term sustainability of a good research environment.

17 UiT The Arctic University of Norway, Faculty of Biosciences, Fisheries and Economics

UiT The Arctic University of Norway, Faculty of Biosciences, Fisheries and Economics							
Units included in the evaluation of economic-administrative research	- The Norwegian College of Fishery Science - The School of Business and Economics			Listed researchers	48		
				Listed research groups	1		
				No. of researchers in listed research groups	47 (30 CVs)		
Other units of the faculty (institution)	- Dept. of Arctic and Marine Biology			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	1/2	2/2	0/0
				Total per year	3	4	0
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year			
	2014	2015	2016				
Funding of the institution				PhD positions	3/11	5/18	2/15
Total expenditures	370 984	390 383	449 663	Post.doc positions	2/2	-/-	1/1
Types of funding				Permanent positions	-/-	1/1	3/6
Core funding from the RCN	251 677	291 575	343 001	Education			
External funding, RCN	35 673	47 184	44 942	Study programmes BA level Economics and Business Admin; Management, Innovation, marketing; Accounting and auditing; Fishery and aquaculture science			
External funding EU	3 033	7 794	5 595	Study programmes MA level Economics and Business Admin; Management, Innovation, marketing; Fishery and aquaculture science; Business Creation and Entrepreneurship; International Fisheries Management			
External funding, other sources	60 024	60 177	54 545	Other			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

17.1 Economic-Adm. research at the institutional level

The Faculty of Biosciences, Fisheries and Economics (BFE) is currently one of eight faculties at UiT The Arctic University of Norway. It was established in 2009 and comprises three academic departments: Arctic and Marine Biology, the Norwegian College of Fishery Science, the School of Business and Economics. Only the latter two are the subject of this evaluation.

17.1.1 Organisation, leadership and strategy

BFE had 2,704 of UiT's total of 16,152 students in 2016, and 110 active PhD students.

The faculty is led by a dean who is employed on a four-year contract, and who is responsible for all activity at the faculty, both academic and administrative. The faculty board has overall responsibility for the running of the faculty, and makes decisions regarding, among other things, strategy, economy and academic and administrative positions.

Each of the academic departments at the faculty is led by an employed head of department, operating on a four-year contract. The head does not operate under a board at any of the departments, and thus has the power and responsibility to make decisions single-handedly.

Research is organised in 20 research groups for the main part, and most academic employees belong to at least one group. Each group has a leader and a well-defined profile that guides its work leading to publications, applications for research projects and master's and PhD theses.

The Norwegian College of Fishery Science has 331 students, and the School of Business and Economics has 2,232 students.

The BFE faculty was established as part of the first merger between the University of Tromsø and a university college. This took place in 2009, and the partner institution was the University College of Tromsø. The result of this was to gather biologists at the faculty (Department of Arctic and Marine Biology), with the addition of some economists and social scientists, marine biologists and marine biotechnicians at the new Norwegian College of Fishery Science, as well as creating a business school.

All education programmes and research at the time were located in Tromsø. Subsequent mergers with university colleges in Finnmark (2013), Narvik and Harstad (both 2016) have led to the establishment of the School of Business and Economics on four campuses. Educational programmes are run on each campus, and research activity is carried out in Tromsø, Harstad and Alta.

During the development of the School of Business and Economics, much emphasis has been given to consolidating education programmes across campuses in order to reduce running costs and to provide a better quality of education on all campuses.

The board of UiT has indicated that it wishes to streamline the faculty structure, reducing the eight faculties today to a lower number. The decision on the final organisation will be taken by the board in June 2017, and could lead to the closure or expansion of the BFE faculty, or to some of its academic activity being transferred to other faculties.

The board of UiT has indicated that it wishes to increase the number of faculties from the current eight. The outcome of this is not apparent to the panel. If the faculty is still in existence after the current round of reorganisation, a new plan will be made for 2018 onwards. In the current period, BFE has chosen to concentrate on three of UiT's five thematic areas: Climate and the environment; Competitive and innovative industry, and Marine resources. It can be concluded that the School of Business and Economics is still active, but it is not clear what has happened to the faculty.

Funding is primarily governmental, as well as from the RCN and other public and private Norwegian sources, with a small part coming from EU sources.

External research funding facilitates the employment of PhD and postdoctoral fellows who devote almost all of their time to research. It is also possible to hire a replacement to cover the teaching time of the principal researchers on projects. External funding is also used to cover the costs of either inviting internationally well-established and well-known researchers, or for group researchers to visit relevant institutions abroad.

17.1.2 Institutional follow-up of previous evaluations

The follow-up of previous assessments is not included in the submission and thus could not be assessed. It is likely that no evaluations have previously been conducted.

17.1.3 Resources and infrastructure

Providing a suitable amount of resources and infrastructure to four campuses is challenging. UiT appears to use modern technology to overcome some of its resource allocation issues.

17.1.4 Research environment

The School of Business and Economics moved into a modern building in May 2016. Each classroom is equipped with technology to connect to student groups outside Tromsø, and to record all activity in the room. Several rooms are used as studios.

The School of Business and Economics hosts the Titlon database with financial information from the Oslo Stock Exchange on behalf of several universities in Norway.

The institution has extensive research collaborations, nationally and internationally. Most of these collaborations are the results of individual researchers' networks and ongoing projects. The institution's strategy for nurturing such activities comprises sabbaticals, individual budgets for conferences and travel, as well as information and courses on funding strategies as well as career plans. Permanent scientific employees who meet the minimum criteria relating to publishing, teaching and other obligations are eligible for a one-year sabbatical every five years.

Every scientific employee has an individual budget. The budget is too small to cover extensive research activities, so is usually spent on travel, books and conferences. This indicates that the institution has a low threshold for facilitating networking activities.

The institution fosters collaborations through active information about funding opportunities and incentive funding for applying together with a partner. The institution also encourages the inclusion of networking and writing funding applications in career development plans.

The institution's strategy for collaboration with non-academic partners is to engage in public dissemination, participate in boards and committees and provide courses or seminars for industry where applicable.

17.1.5 Research personnel

The proportion of professors among the permanent academic staff is about 15-20%. There is a total of 110 PhD-active students, of whom 63 are employed by UiT. The rest are externally funded.

The university and the faculty encourage international mobility. This is facilitated through sabbaticals for permanent scientific employees. Temporary employees are encouraged to spend a period abroad

during the PhD or postdoc period. Such stays may be funded by the institution or by an external funding agency.

BFE has an international PhD training network for social aspects of fisheries management. The network is funded by the EU, and facilitates the mobility of ten PhD students and staff from seven different nations and institutions. Most PhD fellowships are attached to a research group or specific project, and much of the supervision will occur within the group. Initially, a PhD student will be allocated a main supervisor and a co-supervisor, usually from the internal staff.

Researchers work closely together in the group, drawing on national and international networks.

On its establishment, the School of Business and Economics was granted several new positions. In recent years, it has mainly recruited staff to replace those who have resigned or retired. This is also the case for the Norwegian College of Fishery Science. Since there are usually around 10–12 PhD fellows writing PhD theses in the economic-administrative area at any time, they are natural applicants for any positions that become available.

BFE hosts an international PhD training network focusing on social aspects of fisheries management, with joint courses with internationally esteemed institutions. This is an interdisciplinary school, comprising students from different scientific fields.

Since most programmes are taught in Norwegian, a good grasp of a Scandinavian language is usually a prerequisite. Colleagues use their networks to attract applicants to positions, in addition to the usual national and international channels.

The faculty and its departments follow the strategic plan for gender equality at UiT 2015–2020. The work is overseen by the Committee on Gender Equality at the university.

The university also has a strong focus on career development for women, and has implemented a project to enable more women to qualify for professorial-level appointments. BFE currently has three participants in this programme. A network of female researchers in business subjects has also been supported financially by the business school.

UiT dedicates a certain number of adjunct positions to the recruitment of female professors, and both the Norwegian College of Fishery Science and the School of Business and Economics have succeeded in recruiting good role models for female researchers through this programme.

The BFE faculty has its own implementation plan for UiT's gender equality strategy, and it is the faculty with the highest proportion of female professors at UiT.

The business school staff are spread over four campuses due to previous mergers with university colleges. While the current organisation and future organisational plans are not apparent to this panel, it is likely that this will be reviewed with respect to the allocation of teaching and research resources.

17.1.6 Research production and scientific quality

The School of Business and Economics prioritises the following areas: finance, marketing, entrepreneurship, market analysis, analysis of teaching methods in business, and management.

At the Norwegian College of Fishery Science, research relating to business administration is spread between three different research groups. The majority of the research is affiliated to Marine Resource Management and Development (MARA), some in an interdisciplinary group focusing on fisheries management, and one seafood science group.

Researchers work closely together in the group, drawing on national and international networks. PhD students often write their first article together with a supervisor as part of their training. UiT has a generous sabbatical system, and requires that each researcher publishes 0.7 publication points per year in order to apply for research leave.

External research funding facilitates the employment of PhD and postdoctoral fellows who devote almost all of their time to research. It is also possible to hire a replacement to cover the teaching time of the principal researchers on projects. External funding is also used to cover the costs of either inviting internationally well-established and well-known researchers, or for group researchers to visit relevant institutions abroad.

They attach an article published in *Journal of Business Research*, the highest-ranking journal in which they publish. It has one non-Norwegian author. Its other publications are very Norwegian, and some are very specialised (fisheries for example).

Assessment of scientific quality: 3 - good

17.1.7 Interplay between research and education

The School of Business and Economics has responsibility for several types of bachelor's and master's programmes in business. All teaching is research-based, but does not necessarily relate to a teacher's own research. However, teachers use models and examples from their own research whenever possible. The research-led teaching focus can potentially be strengthened given the healthy student/staff ratio.

The School of Business and Economics has a long tradition of testing new types of teaching methods, and documenting their effects in national and international journal articles. The focus has been on turning the classroom around in order to centre attention on student-learning rather than teaching.

17.1.8 Societal relevance and impact

The research undertaken at NCFs/BFE is centred around the ocean, which is one of the thematic areas in the long-term plan.

Some research at the School of Business and Economics revolves around the value chain for seafood and products based on ocean research (such as biotechnological discoveries). Furthermore, a research group is devoted to analysing the entrepreneurial university, as an actor in society and as a catalyst for commercialising research-based ideas. Other groups are interested in social entrepreneurship.

Researchers actively disseminate through books and chronicles and other media, and have been involved in several policy processes, both nationally and internationally.

Impact case: Povfish project 2008 to 2011 funded by the Research Council of Norway.

The Povfish project aimed to increase understanding of the status and prospects of small-scale fisheries for eradicating poverty and enhancing the well-being of small-scale fisheries globally, which number more than 100 million people. In addition to the academic outputs (three books, peer-reviewed articles and theses), it served as an important input to FAO's (UN Organization for Food and Agriculture) work on developing the Voluntary Guidelines for Securing Small-Scale Fisheries in the Context of Food Security and Poverty Alleviation, endorsed by member states in 2014.

The Povfish project is part of an ongoing research endeavour, and runs until 2019. It is linked to the 'Too Big To Ignore' project which has strong civil society organisation representation, and one of its research clusters focuses on the implementation of the Small-Scale Fisheries Guidelines.

17.1.9 Overall assessment

UiT is spread over four campuses, which means that it is not possible for some of the smaller campuses to attract researchers and hence projects. This constitutes a financial challenge.

Finances are also challenged by the need for a fleet of boats and machinery for experiments.

There seems to be a lot of interest in teaching and teaching methods, and one wonders whether that leaves enough time for project applications. The system also favours competition for internal funds. Moreover, some staff do not have a research background.

External non-public-sector funding is quite limited and has room for improvement. The dependency of research on direct and indirect public funding makes the scientific work vulnerable to cutbacks in public budgets.

17.1.10 Feedback

The fact that UiT is spread over four campuses is certainly a weakness, as it seems to be difficult to attract staff to the smaller campuses.

Moreover, the running of their programmes entails extensive costs such as a fishing fleet and machinery.

Although Northern Norway is 'exotic' and can easily attract top researchers for short/long-term visits, too much time seems to be spent on teaching and competing for internal funds, at the expense of research and project applications.

The university might examine the feasibility of merging into one campus, which would create an economy of scale, reduce costs and make it more attractive to qualified researchers as well as students. This might be coupled with, and would facilitate, more international projects and international collaboration.

A useful and honest SWOT analysis is attached with the submission. This shows awareness of the important challenges and can be updated and discussed on a continuous basis as part of the institutional strategy.

17.2 Research Group: Economics and Business

Administration

Historically, the discipline of Economics and Business Administration has been a part of the Norwegian College of Fishery Science. The college has been a part of UiT since 1988, and became a faculty in 1997.

The main education programme was in fishery science, with business subjects as supporting subjects. Economics and Business Administration became an education programme in its own right at bachelor's level in the early 2000s, and the master's programme was established in 2004.

In 2009, the University of Tromsø merged with Tromsø University College, and substantial changes were made to the organisation of UiT. The Norwegian College of Fishery Science became an academic department as the new Faculty of Biosciences, Fisheries and Economics, retaining the business faculties most interested in fisheries. A new academic department was created at the same faculty; a business school that is now called the School of Business and Economics at UiT.

The research group Economics and Business Administration comprises academics from the Norwegian College of Fishery Science and the School of Business and Economics in the following subject areas: marketing and strategy, leadership and organisation, entrepreneurship, innovation, management and business economics, finance, accounting and law.

UiT's strategic goals are presented in more detail in the Strategic Plan for 2014–2020. The research activities in economics contribute to the general priority areas: Sustainable Use of Resources, and Community Development and Democratisation.

External funding is important to the research group for funding activities such as conference participation and networking activities, but also for doctoral and postdoctoral fellowships.

17.2.1 Organisation, leadership and strategies

The School of Business and Economics facilitates most of its business research through research groups, each group being led by a prominent researcher from the internal staff.

Research in business and administration subjects at the Norwegian College of Fishery Science is organised in three different research groups, each group also being led by a prominent researcher from the internal staff.

Some publications are aimed at general journals and others at field journals. Some research – especially that relating to the Norwegian context – is written in Norwegian and published in Norwegian or other Scandinavian channels. The group seeks to present its work nationally and internationally at conferences, with the aim of expanding its network.

The group submits several research applications in the course of a year, to both national and international sponsors (EU). Assistance is provided in connection with the formalities of the application process, in the budgeting process and identifying good financing opportunities.

The university library at UiT has been a forerunner in the establishment of digital collections of books and periodicals, and has excellent specialised computing facilities.

17.2.2 Research personnel

All PhD fellows are members of the research group, and hence receive wider support than from their supervisory team. The group leader plays a significant role in formulating the research proposal and choosing the preferred candidate. Those higher up in the academic hierarchy can be mentors for more junior colleagues, although this is not particularly common 'due to quite a flat structure among Norwegian researchers'. This is perceived as a strange understanding of mentorship, since PhD and postdoctoral fellows, at the same time, are full members of the research group and can receive guidance from others than their supervisory team.

All PhD and postdoctoral fellows are encouraged to spend at least one term abroad during the course of their research. For PhD candidates, the research group members will often use their contacts to secure a competent academic advisor for the candidate at the institution abroad.

The group has industry partners within fisheries and aquaculture in large-scale projects, typically funded by the EU. The group has a long-standing cooperation with NORAD, both through consultancy and development projects within research and education. Through NORAD, the group occasionally works with FAO and OECD.

17.2.3 Research production and scientific quality

The School of Business and Economics prioritises the following areas: finance, marketing, entrepreneurship, market analysis, analysis of teaching methods in business, and management.

At the Norwegian College of Fishery Science, research relating to business administration is spread between three different research groups. The majority of the research is affiliated to Marine Resource Management and Development (MARA), some in an interdisciplinary group focusing on fisheries management, and one seafood science group.

The funded research activities seem to mainly be related to the marine activities and the share of traditional business/economics/administrative research appears very limited, though this was not easy to determine with certainty from the data provided.

Researchers work closely together in the group, drawing on national and international networks. PhD students often write their first article together with a supervisor as part of their training. UiT has a generous sabbatical system, and requires that each researcher publishes 0.7 publication points per year in order to apply for research leave.

External research funding facilitates the employment of PhD and postdoctoral fellows who devote almost all of their time to research. It is also possible to hire a replacement to cover the teaching time of the principal researchers on projects. External funding is also used to cover the costs of either inviting internationally well-established and well-known researchers, or for group researchers to visit relevant institution abroad.

The submission includes an article in Journal of Business Research, the highest-ranking journal in which they publish. It has one non-Norwegian author. Other publications are very Norwegian in their authorship, and some are very specialised (fisheries for example). About five of the 41 submitted articles seem to have international collaborators.

17.2.4 Networking

Many contacts are made at international conferences. The group also cooperates extensively with other research institutions, such as NOFIMA, SINTEF, NORUT, and the Institute of Marine Research.

Some senior professors are connected to FAO. Another important arena is the MARE conference, which takes place every second year in Amsterdam. Cooperation with partners outside academia, includes fishery and aquaculture companies, organisations and other stakeholders in the fisheries and aquaculture sectors, as well as with the Norwegian Ministry of Trade, Industry and Fisheries.

17.2.5 Interplay between research and education

All teaching at UiT is research-based, and each researcher spends 47.5% of their work year on teaching and supervision. Students may also be involved in group members' research activities, for example by participating in experiments that lead to new data sets.

17.2.6 Societal relevance and impact

The research undertaken at NCFB/BFE is centred around the ocean, which is one of the thematic areas in the long-term plan.

Some research at the School of Business and Economics revolves around the value chain for seafood and products based on ocean research (such as biotechnological discoveries). Furthermore, a research group is devoted to analysing the entrepreneurial university, as an actor in society and as a catalyst for commercialising research-based ideas. Other groups are interested in social entrepreneurship.

Researchers actively disseminate through books and chronicles and other media, and have been involved in several policy processes, both nationally and internationally.

The Impact case Povfish project 2008 to 2011 funded by the Research Council of Norway can potentially have a huge impact worldwide.

17.2.7 Overall assessment and feedback

There seems to be a lot of interest in teaching and teaching methods, which beggars the question whether that leaves enough time for project applications. The system also favours competition for internal funds. Moreover, some staff do not have a research background.

More international projects and collaboration is needed.

Assessment of research group: 3 - good

18 University College of Southeast-Norway, School of Business

University College of Southeast-Norway, School of Business							
Units included in the evaluation of economic-administrative research	<ul style="list-style-type: none"> - Department of Business, Marketing and Law, - Department of Business, History and Social Sciences - Department of Business and IT - Department of Business, Strategy and Political Sciences 			Listed researchers	39		
				Listed research groups	2		
				No. of researchers in listed research groups	16 (44 CVs)		
Other units of the faculty (institution)	Training, recruitment and academic positions						
		2014	2015	2016			
	No. of PhD graduated at the institution per year						
	Male/Female	-/-	-/-	-/-			
R&D expenditures and sources of funding (1000 NOK)			Total per year	-	-	-	
	2014	2015	2016	No. of positions announced / No. of qualified applicants per year			
Funding of the institution			PhD positions	5/3	5/6	5/8	
Total expenditures	35 431	38 086	41 688	Post.doc positions	-/-	-/-	-/-
Types of funding			Permanent positions	20/34	20/37	13/24+	
			Education				
Core funding from the RCN	16 846	21 609	27 395	Study programmes BA level Business Administration and Management, Commercial Law and Business Administration, Law, Marketing Management, International Marketing, Accounting and Auditing, Innovation and Entrepreneurship, Tourism Management			
External funding, RCN	7 045	3 400	3 760	Study programmes MA level Business Administration, Management, Innovation and Management			
External funding EU	0	371	306	Other: On January the 1st in 2016, the University College of Southeast Norway (USN) was established, when Buskerud and Vestfold University College (BVC) merged with Telemark University College (TUC).			
External funding, other sources	11 540	12 706	10 227				

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

18.1 Economic-Adm. research at the institutional level

The University of Southeast Norway (USN) was formed in 2016 from the merger of Buskerud and Vestfold University College (BVC) and Telemark University College (TUC). It is Norway's largest state-owned university college by student numbers (18,000 students and 1,500 staff). USN's structure comprises five administrative departments and four faculties, including the School of Business (SoB). The school offers undergraduate, postgraduate and post-experience education, with approx. 4,400 students and 210 staff, and activities based on six of the eight USN campuses.

18.1.1 Organisation, leadership and strategy

The School of Business' four departments are Business, Strategy and Political Sciences; Business, History and Social Sciences; Business, Marketing and Law; and Business and IT. Three research groups are submitted to the Economic-Administrative research area: Marketing Management, Sustainable Tourism and Social Sustainability.

The launch of USN at the start of 2017 was in response to the Norwegian Government's structural reform of higher education, involving two separate mergers between medium-sized universities. USN has sought to develop an integrated and resource-efficient institution that delivers high quality and relevant education programmes and research. A new organisation and administrative system and common academic governance procedures have been established. While this has been a disruptive and resource-intensive period, it has been used as an opportunity to improve policies, regulations and practices.

USN has an appointed rector and deputy pro-rector. There are vice rectors for education and quality in learning, and for research, innovation and internationalisation. This arrangement helps ensure that both education and research have a voice at the highest level in the institution. SoB is headed by a dean, supported by a head of administration and an administrative team. Mirroring the university level, there are vice-deans for research academic programmes and for research, development and innovation. Department heads report to the dean.

An institutional strategy is in place for 2017-2021, with objectives covering study portfolios and educational quality, research and academic development, regional cooperation and internationalisation. USN aims to be regionally rooted and internationally competitive, a vision that is underpinned by the building of close societal and business partnerships, and by developing practically and socially relevant research and training that contributes to the bigger global challenges. The vision aligns well with current research funding priorities that focus on Grand Challenges.

Due to the very recent establishment of the institution, some details concerning research and academic development are in flux. SoB is currently developing its strategy in alignment with the USN strategy. There is a focus on social responsibility, prioritising initiatives that emphasise responsible management and organisational development.

18.1.2 Institutional follow-up of previous evaluations

Not relevant.

18.1.3 Resources and infrastructure

A reasonable level of resources is in place for internal and external use. Funding is mainly from the Norwegian Government, the RCN and other public and private national sources, with very limited international funding. Because of the transitional nature of the institution, funding is shown only as estimated R&D spending (at 24%). Further questioning suggests the current external funding level is a

rather modest 10%, with aspirations to increase this level to 20%. Such an increase will rely heavily on the research groups.

18.1.4 Research environment

Collaborations with leading actors in industry contribute to a dynamic research environment. A combination of theoretical disciplines and methodological approaches to research is evident. Strong investments have been made in research infrastructure during the merger and is ongoing across campuses, including the provision of physical research centres and laboratory facilities. There is appropriate library and IT provision, with a focus on developing open access solutions.

Conferences and meetings attended by members of the research groups are used as platforms for recruiting new group members, as well as identifying academics for potential recruitment to vacancies or visits in conjunction with sabbatical or research leave.

18.1.5 Research personnel

From 2016, all permanent positions require a PhD or equivalent and staff members without a PhD are encouraged to pursue one. There is an appropriate policy for gender equality that stresses the need for staffing to reflect the Norwegian population. Although the numbers of male and female staff are balanced in the institution as whole, in SoB just under 30% are women. Fewer women are represented in senior roles, a situation that USN is addressing through a targeted programme supporting career development and providing additional research time. Overall, the availability of resources for faculty and staff development is described as 'limited' in the SWOT analysis.

HSN is in the process of implementing a new research strategy, which aims to increase recruitment of academic staff, grow PhD numbers and increase staff mobility. Plans to support mobility and career paths are therefore currently emerging, which makes them difficult to evaluate. Internationalisation of staff is a priority, though, with the aim of enabling international staff visits of varying durations. The institution encourages participation in EU mobility programmes such as Marie Curie Sklodowska Actions, and will support mobility using Erasmus + and INPART.

The two institutions merging to form USN had both implemented the European Charter Code for Researchers and had been awarded the brand HR Excellence in Research. USN continues to abide by the principles of the code.

The recruitment policy is designed to ensure well-qualified research staff apply and are appointed. Required research competence is tightly specified, national and international academic gatherings are used to recruit staff, and emphasis is placed on raising the quality of the research environment to ensure SoB is an attractive place to work. The appointment of adjunct professors is helping to increase research capacity, while an internal mentoring scheme is being established to support career development. The impression is that this remains work in progress.

HSN offers a PhD in Marketing Management. Staff members train and mentor PhD students in cooperation with universities in Norway and abroad. There has, however, been some instability in the numbers of new PhD positions and staff recruited and the application pools generated have sometimes been rather limited. In 2014, just nine PhD candidates were attracted when ten vacancies were available, although the figures have improved recently. The extent to which vacancies attract international applicants is unclear.

18.1.6 Research production and scientific quality

SoB aims to improve its position as a provider of research at the regional, national and international levels, by emphasising its close collaboration with business and societal stakeholders. It has strong regional partnerships, including through the RCN's REISEPOL programme, with business nationally and through the former VRI partnership, and through its dissemination to private, public and voluntary networks and organisations, as well as the VIVANT project.

Although implementation is still underway, a well-articulated strategy for supporting research development has been produced. The strategy emphasises international collaboration, securing external funding, ensuring research impact and supporting high-quality scientific publication. It includes a training programme to improve publication quality.

Each of the three research groups has good capacity, which bodes well for future sustainability. All groups prioritise balancing good quality scientific research with relevance. They bring together academics with different subject interests and expertise, supporting interdisciplinarity, probably a contributing factor to their success in attracting research funding associated with Grand Challenges. Research projects, such as REISEPOL, typically involve collaborative work with other academic and non-academic partners, reinforcing the wider impact of projects. The evidence of international links is less strong, although the number of internationally co-authored publications is similar to the panel average. An ongoing focus on measures to support internationalisation is needed.

Allocated research time is results-based, reflecting publications from the past three years as well as strategic priorities (connection to research groups, priority areas, major research project). Generous allocations of research time are in place: young researchers have 30-50% for research, and professors have 40-50%. Staff can be allocated extra research time in connection with externally funded research projects.

The publication points per researcher in the period 2014-2016 are somewhat below the average for the Economic-Administrative research area. The share of level 2 publications (books, book chapters and journal articles) is also below the panel average. However, the share of level 2 publications for books alone is above the average for this research area. The selected ten publications are of a good level of quality, several of which are in some of the top international journals in their field. In terms of research production and scientific quality, submission is not far from average, which suggests there is a reasonable basis on which to build for the future.

Assessment of scientific quality: 3 - good

18.1.7 Interplay between research and education

Links between research and study are quite well embedded and there is an emphasis on carrying out research with relevance. All researchers are involved in teaching, providing an opportunity to undertake teaching that connects with their research. This is arguably a less proactive approach than if the curriculum was based around research interests. Although not routinely the case, there are opportunities for master's students and sometimes for undergraduate students to engage in projects involving research with industry partners and staff. There is an interest in learning design and in student collaboration to improve learning composition.

18.1.8 Societal relevance and impact

Through profession-oriented, work-oriented and socially relevant research and training, USN has robust societal impact, translating into positive changes for society. This work involves a healthy mix of alliances and partnerships with actors at the local, regional and national levels. There is a very strong fit between the research undertaken at SoB and the priorities of the Long-term plan for Research and

Higher Education (LTP) (2, 3, 4 and 5), with an impressive array of projects and strong funding successes supporting these areas.

Knowledge exchange and the impact of research appear strong, reflected through a mix of lectures, reports, paper and media coverage. The strategies for knowledge exchange and engagement clearly identify a diverse variety of stakeholders, including researchers, students, policymakers, the public, the press, public and private organisations, with areas of activities described for each.

The four impact case studies clearly demonstrate the impact of the institution's research with several different stakeholder groups beyond academia. Although each of the cases has an interesting story to tell, the REISEPOL impact case is particularly impressive in term of the breadth and depth of its impact. The case, which describes a programme of travel research that examines sources of competitive advantage, has influenced government policy and practice in the sector helping to support growth and competitiveness.

18.1.9 Overall assessment

HSN has been active at the regional/national level, and has established strong links with industry and policymakers, resulting in high-level national and international cooperation. This is reflected in the relative scientific impact of its work being above average for the panel in Norway. The scientific impacts of its research in the Nordic region and compared to OECD countries are both close to the panel averages. These collaborations also help underpin publications in highly-rated scientific journals and the impacts on policy and practice.

Although this has been a disruptive period for the institution, areas of good quality work that make a strong academic contribution are demonstrated. The impact profile of the work is very good, and shows a nuanced understanding of what it takes to engage different stakeholders. There is an excellent fit with the LTP priorities. As might be expected for an institution at this stage of development, however, the quality varies across research areas. The implementation of some areas of the strategy is still in process, with attention needing to be given to future external funding and internationalisation. However, good foundations are in place.

18.1.10 Feedback

Close monitoring of the development and implementation of new strategies will be needed, with particular areas requiring: (i) staff development, to check the scope and effectiveness of plans to support mentoring and career development; (ii) internationalisation, to increase the international diversity of activities; (iii) external funding, to ensure the necessary support and researcher training are in place to increase funding and broaden its sources; (iv) recruitment, to grow applicant pools (including internationally) for the PhD programme and staff vacancies.

There will be opportunities to focus more on interdisciplinarity as the new organisation structure becomes more embedded.

18.2 Research group: Marketing Management

The Marketing Management research group sits within the School of Business (SoB). Established in 2002 with a focus on tourism management, the group has recently grown in size and broadened its remit to include marketing management research. The research focuses on knowledge development to develop and maintain sustainable, competitive and valuable products, businesses and communities; especially in tourism.

18.2.1 Organisation, leadership and strategies

The dean of the School of Business is head of research, academic work, administration and finance. Two vice-deans are responsible for academic programmes and research, development and innovation respectively.

SoB is mainly funded through the state budget. The Research Council of Norway (RCN), local and regional authorities and other university institutions are also important financial sources. During the period 2013–2016, SoB has participated in two RCN projects funded by grants through the PETROSAM and REISEPOL programmes. The Marketing Management group is sizeable and growing. The group's strategy aims to balance rigour and relevance, with a focus on producing high-quality research that has academic and practical impact. It has been highly successful in attracting external funding and is on a good trajectory. A well-established approach to leading and managing the group is in place, involving researchers rotating as head of the group, with a separate programme head for the PhD programme.

The strategy emphasises research that combines academic rigour with impact on policy and practice, including through funded projects to support the competitiveness and sustainability of tourism. Partnerships with public bodies and private enterprises underpin this approach, shaping the design of current research and informing future projects.

The group supports USN's strategy to undertake research that emphasises cooperation between different stakeholders and which has implications for policy and practice. As well as undertaking research that supports regional partnerships, it has been instrumental in supporting cross-disciplinary research in cultural heritage and tourism, an area of strategic focus for USN.

The institution provides resources that contribute to supporting the group's research environment, including IT support, library, research administration support and an experimental lab.

As government funding is expected to decrease, the research group will need to continue to explore regional, international and private funding opportunities. The Norwegian Government's Long-term plan for research and higher education 2015–2024, which includes topics linked to sustainable tourism, also offers an opportunity to insure funding for the coming years. More EU funding should be aimed for, as this funding source will also likely increase.

18.2.2 Research personnel

The size of the group makes it possible to continually recruit new members, who benefit from developing research skills on live projects and in publishing in an apprenticeship approach. PhD students are well integrated into the group and often involved in their supervisors' projects. Good support and training are in place to support them, with opportunities to gain feedback on their work at regular seminars and through two annual events. PhD students benefit from the group's international connections and are encouraged to spend time abroad with partner institutions.

The SoB plans to enhance mobility for researchers and students and to increase the proportion with international experience. Concrete actions to support staff and researchers in their career paths are

planned. Participation in the EU-programmes for mobility, such as Erasmus+ and Marie Curie Sklodowska Actions is encouraged. Members of the group take part in these opportunities and also use national and international academic conferences and meetings to recruit new academics to vacancies and part-time positions.

18.2.3 Research production and scientific quality

The group's distinctiveness lies in producing good quality research that balances research with relevance. This ambition shapes its identity, trajectory and likely future development. There is high productivity at the regional/national level. Publications in highly rated scientific journals and impacts for policy and practice have resulted. The combination of productivity, industry collaboration, publication quality and international visibility, contributes to very good research quality.

The group pursues theoretical development through conferences and workshops involving leading international academic speakers. As the research focuses on how social sustainability is achieved in relation to research areas such as economics, political studies, cultural studies, an interdisciplinary and multidisciplinary profile is needed. It is evident from the projects and publications that members collaborate productively with complementary disciplines, such as ecology, cultural studies and outdoor recreation.

Strong partnerships with industry partners and policy makers support relevance and are central to the group's very successful track record in attracting external grants (16 projects since the group's inception in 2002). Impressive contributions are made to practice, including a wide variety of product and service innovations, outcomes to support policy development, and training.

18.2.4 Networking

Collaboration and networking are central to the group's activities at the institutional, national and international levels. In addition to ongoing co-operations with the public and private sectors and with other research groups within the institution, there are relationships with a range of good quality international institutions. These include, as one of 15 partners, the International Network for Tourism Education and Research. Such partnerships have generated some high quality co-authored publications and also help support the delivery of national conferences. The group facilitates student projects with its external partners, and hosts research seminars and conferences to which PhD students and researchers from HSN and other institutions are invited.

18.2.5 Interplay between research and education

Teaching is strongly embedded in the activities of the group through the creation and leadership of undergraduate, Masters' and PhD programmes. MA-students and sometimes BA-students participate in research and other research group activities. They work on research problems, together with industry partners, and on joint projects with research group members.

A PhD programme in Marketing Management, which aims to bring academic research closer to marketing management practice has recently commenced. The focus is on generating knowledge for real-world problems. Research group members contribute to the supervision, training and mentoring of these PhD students. In addition, faculty members train and mentor PhD students recruited in cooperation with universities in Norway and abroad.

18.2.6 Societal relevance and impact

Through profession-oriented, work-oriented and socially relevant research and training, the group has strong societal impact, which has translated into tangible changes in society. To support the impact of

its research, the group must continue to build and maintain alliances and partnerships with a range of stakeholders at the local, regional and national levels and seek to publicise these impacts.

18.2.7 Overall assessment

The overall impression of research quality is good, as is its significance within the national context. The Marketing Management group has been active at the regional/national level, and has established strong links with industry and policymakers, resulting in high-level national and international cooperation. As a result, the group's research projects have often involved industry collaborations, with outcomes including publications in highly-rated scientific journals and changes in industry policy and practice.

Assessment of research group: 4 - very good

18.2.8 Feedback

The recently established PhD programme in Marketing Management will need to be closely reviewed.

The group should take advantage of the SoB internationalisation plan to become more international and to increase the diversity of its networks and funding (including EU funding).

The group should explore funding opportunities emerging from the Norwegian Government's long-term plan for research and higher education 2015–2024.

18.3 Research group: Sustainable Tourism

The School of Business (SoB) conducts teaching and research in business and management, and disciplines that establish business and management in a wider political, social and historical context to generate value creation, economic sustainability and better social outcomes.

The Sustainable Tourism research group is one of three active research groups, and conducts research and R&D projects in the nexus between social, economic and cultural sustainability, tourism and transformative economies. The group works in close collaboration with other complementary disciplines, such as ecology, cultural studies and outdoor recreation. Its goal is to produce research that is useful and applicable outside academia, for industry associations, tourist boards and public authorities and for local and regional businesses. The group has a strong focus on aspects of sustainable tourism.

18.3.1 Organisation, leadership and strategies

Although only established relatively recently, the group has made rapid progress and is already on a strong trajectory. This trajectory is demonstrated through the good number of funding successes and practice-based consultancy activities during its first few years since inception. The fact that good quality outputs in well-regarded journals in the field are emerging is a good indication of the quality of its research.

SoB currently has three active research groups, and further research groups will be established in 2017. The dean is head of research, academic work, administration and finance. Two vice-deans are delegated responsibility for the academic programmes and research, development and innovation respectively.

The group has implemented activities to help support the dissemination, impact and reach of its work, e.g. through hosting international events. It has a particular focus on developing its social media presence, including a successful blog. Very few details are offered about the leadership of the group.

For example, it is unclear whether individuals or bodies from outside the institution are involved in governance.

The group has a reasonable number of permanent members. Its interdisciplinarity, which is a feature of the research, is supported by the involvement of other faculties in the institution. Drawing on the expertise of others in related disciplines is entirely appropriate for those working in this area.

The focus of the research is on supporting sustainable tourism nationally, whilst contributing to national and international debates in the field. A balance is sought between the theoretical, practical and policy contributions that the research achieves, and the group expresses a commitment to ensuring its research impact on teaching and the curriculum.

The group's focus is highly synergistic with the strategic priorities of the institution. Firstly, the concentration on sustainable tourism fits closely with HSN's sustainable development priorities. Secondly, the group supports the broader aspirations of the institution to promote its internationalisation agenda through the delivery of high-quality research.

External funding is a core focus and a key requirement for ensuring the future sustainability of the group. So far, it has achieved a very positive response to its funding efforts, which is indicative that its work is in a priority area for funders, which is a good sign for the future.

The main source of funding is through the state budget, but also from the Research Council of Norway (RCN), and local and regional sources. The groups have received external funds for numerous projects through county governors, industry partners, Norwegian and international governments, the Nordic Council of Ministers, the Research Council of Norway, the Norwegian Centre for International Cooperation in Education, the Norwegian Directorate for Cultural Heritage, NORPART, Innovation Norway and the EU.

As government funding is expected to decrease, the research groups need to continue exploring external funding possibilities, regional as well as international (more EU projects), and public as well as private (close collaboration with industry). On the other hand, in the Long-term plan for research and higher education 2015–2024, the Norwegian Government has identified six long-term priority areas, and they include topics strongly related to sustainable tourism, which means that there are great opportunities for the university to collaborate actively in these programmes and secure funding for the coming years. More EU funding should be sought, as this will also increase internationalisation.

The institution provides a range of support in terms of library, IT, research administration and staff development. It has played an important role in supporting the group's application for external research funding.

18.3.2 Research personnel

Few details are offered about the approach to staff recruitment, which raises a possible question about capacity and sustainability. There are a good number of associated researchers from international partners.

The number of PhD students is currently small, although given the trajectory of the group, there is good potential to expand these numbers. Evidence is provided that the group's supervisory capacity is growing, which will be necessary to support a more substantive PhD community. PhD students are integrated into the day-to-day activities of the group, with opportunities to develop research design, publishing and presentation skills. Integrating the group's students into the wider PhD community of students working in related areas is a positive step for overcoming some of the problems that can arise from small PhD numbers.

SoB plans to increase mobility for researchers and students as well as concrete actions for supporting the staff and researchers in their career paths, using the educational funding programmes Erasmus + and INPART. The institution encourages staff and researchers to participate in the EU mobility programmes such as Erasmus+ and Marie Curie Sklodowska Actions. SoB also plans to increase the proportion of academic staff members and PhD candidates with international experience.

Staff development is, as expected for a relatively modest-sized group, supported at the institutional level. There is strong evidence of the group's intention to develop its profile as a provider of PhD education, through its involvement in national and international PhD forums and events. The group has aspirations for its students to benefit from international exchanges. Current students routinely collaborate with industry partners. Overall, while this is an emerging picture, the early signs are positive.

In 2016, 54.2% of the staff at USN were women, while 29.2% of the staff at SoB were women. In order to close the gender gap, SoB supports female researchers in their career paths towards promotions as professors and docents by allocating more time for research.

18.3.3 Research production and scientific quality

The group has high productivity at the regional/national level. Research projects involve collaboration with industrial partners, policymakers and other researchers, and have resulted in a number of publications in highly-rated scientific journals, as well as changes in industry policy and practice. SoB is also represented in the new research programme funded by the ministry from 2017 onwards.

The group's research examines a wide range of themes, although there is particular interest in sustainable tourism in rural areas and in the use of storytelling as a means of developing attractions. These themes are demonstrated to some extent in the funded projects that the group has already delivered or is in the process of delivering. It is possible that the breadth of its current portfolio may be attributed to the group's relatively young age and that greater focus on a more limited number of themes might emerge over time. This issue is presumably one that the group will explore when it considers its future strategy.

Some research is co-authored with external scholars and leads to high-quality publications.

Given the productivity, collaboration with the industry, quality of publications and international visibility, the research quality is excellent.

The focus of the research is on how social sustainability is achieved in relation to different research areas such as economics, political studies, cultural studies and so forth. This entails an interdisciplinary and multidisciplinary profile. It is clear from the projects and publications that the group works in close collaboration with other complementary disciplines, such as ecology, cultural studies and outdoor recreation. This is obvious in research projects involving collaboration with industrial partners.

The group facilitates student projects with external partners, and hosts research seminars and conferences to which PhD students and researchers from HSN and other institutions are invited.

It is not entirely clear to what extent the activities the group has engaged in are part of a wider strategy, in order to develop the group's profile and the quality of its work. However, an impressive mix of projects is described, which demonstrate the group's ability to secure funding from a variety of different academic and practice-based funding sources, both nationally and internationally. The fact that some of these projects include international partners is indicative of the group's growing international profile. The impact of the group's research on academia and practice appears to be wide-ranging.

18.3.4 Networking

SoB collaborates closely with the industry on relevant research. This collaboration is organised through partnerships in research projects, where other national and international universities are partners. Members of the group use national and international academic settings, such as conferences and meetings for the potential recruitment of new members to the discipline, as well as to identify academics for potential recruitment to vacancies and part-time positions.

The group is on a good trajectory to expand its national and international networking, with evidence of strong links to academic and practice-based partners within Norway, as well as some evidence of international links, mainly through research project collaborators. This networking will continue to grow over time.

18.3.5 Interplay between research and education

The staff engage in research-based teaching at all levels of education. MA students, and occasionally BA students, participate to a certain extent in research and related activities in the research groups. They work on research problems, together with industry partners, and on joint staff-student research group projects. The research groups include professors, senior researchers, postdocs and PhD students and involve bachelor's degree and master's degree students. The group facilitates student projects with external partners.

Although it is early days for the research group, the academic staff have designed and are involved in delivering a module on the undergraduate programme and making contributions to the MA in Tourism Studies. The extent to which the staff is involved in teaching is unclear. It also makes contributions externally and to the SIU Summer School. One would expect to see the teaching contribution evolve as the group becomes more established.

18.3.6 Societal relevance and impact

Through profession-oriented, work-oriented and socially relevant research and training, the group has strong societal impact, translating into actual changes in society.

The group is researching impacts for positive change in society. For this purpose, alliances and partnerships with actors at the local, regional and national levels are necessary.

18.3.7 Overall assessment and feedback

The Sustainable Tourism group has been active at the regional/national level, and has established strong links with industry and policymakers, resulting in high-level national and international cooperation and publications.

They can take advantage of the internationalisation plan that SoB has drawn up to become more international and more diverse. There are strong opportunities for focusing on international projects in Sustainable Tourism, to strengthen the internationalisation of the group.

Assessment of research group: 4 - very good

19 University of Agder, Faculty of Social Sciences

University of Agder, Faculty of Social Sciences							
Units included in the evaluation of economic-administrative research	- Dept. of Information Systems			Listed researchers	29		
				Listed research groups	2		
				No. of researchers in listed research groups	13 (11 CVs)		
Other units of the faculty (institution)	- Dept. of Global Development and Planning - Dept. of Political science and Management - Dept. of Sociology and Social work			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the department per year			
				Male/Female	1/2	2/1	1/1
				Total per year	3	3	2
				No. of positions announced / No. of qualified applicants per year (at the department)			
R&D expenditures and sources of funding (1000 NOK)							
	2014	2015	2016				
Funding of the institution				PhD positions	1/4	3/7	2/7
Total expenditures	65 341	71 470	73 672	Post.doc positions	1/0	1/1	0/0
Types of funding				Permanent positions	1/7	1/10	0/0
Core funding from the RCN	35 321	36 919	38 018	Education			
External funding, RCN	4 622	7 659	4 365	Study programmes BA level IT and Information Systems			
External funding EU	161	116	2 011	Study programmes MA level Information Systems			
External funding, other sources	5212	2244	4256	Other PhD specialisation in Information Systems			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

19.1 Economic-Adm. research at the institutional level

19.1.1 Organisation, leadership and strategy

The Faculty of Social Sciences at the University of Agder consists of four departments, i.e. Political Science and Management, Sociology and Social work, Information Systems, and Global Development and Planning. The faculty board led by the dean is responsible for the faculty's research strategy. The research activities are conducted by the research groups, in addition to the faculty partners and several research centres at the university. The dean is the head of research at the faculty level, while the 13 research groups are fairly autonomous with their own goals, strategies and activities, within the framework of the university's goals and plans. Faculty-level staff support and funding of activities (not specified) are offered to the research groups. Groups that do not meet a given set of criteria (not specified) will be discontinued.

A more detailed university-level strategic plan for research and development for the next ten years is evidently in progress, with the stated strategic learning and education goals for the future; Social involvement and innovation; and Global mindset. These goals are very similar to those of most if not all Nordic universities. There is a quite a long list of priority research areas (one or two for each department) at the faculty level, with digitalisation a top priority across departments and in collaboration with other faculties and external partners.

The majority of the faculty's funding comes from the Norwegian Government as core funding. External funding is reported to be low (14% in 2016), and comes from the RCN, public and private Norwegian sources and the EU. The private Norwegian sources are particularly insignificant, and require attention. At the department level, the two research centres vary in terms of external funding.

19.1.2 Institutional follow-up of previous evaluations

In the previous 'Economic research in Norway' evaluation, UiA's Department of Economics and Business Administration was evaluated as 'fair'. This department is not part of this evaluation.

19.1.3 Resources and infrastructure

At the university level, major investments have been made in research infrastructure in the form of research labs, but these are not related or relevant to social sciences. The co-creation centre for R&D collaboration, which is planned to be established in 2018/2019, is more relevant to the faculty.

Administrative support for researchers is perceived to be underdeveloped, leading to insufficient time for research work.

19.1.4 Research environment

Both national and international collaboration are highly prioritised, and to that effect, a plan is being developed to establish a co-creation centre to facilitate such collaborations. Furthermore, the researchers are encouraged and expected to engage in network-building both in academia and with external partners, and some funding is provided in this context. Research visits to other institutions are also encouraged, but no evidence is provided of how well this has been realised.

19.1.5 Research personnel

The Department of Information Systems currently employs eight full professors, one docent, six associate professors, three assistant professors, one postdoc and 15 PhD students.

PhD students are well integrated into all departments. In the Department of Information Systems, all PhD students are involved in one of the research groups. This is a commendable practice. The faculty's PhD programme is a systematic three-year programme including a course module. The Department of Information Systems reports to have one of the most successful PhD programmes at the university, with a positive evaluation from an external evaluation panel.

The faculty reports having implemented the European Charter and Code.

At the faculty level, researchers (including postdocs and PhD students) are encouraged to apply for research visits abroad, applying for funding for such visits from external sources (national and international organisations). It also appears to be possible to fund research leaves through the professional development account.

The gender balance seems to be a key issue at all levels (university, faculty and department). This challenge is being taken seriously and actively addressed. There seems to be sufficient balance at student level (also PhD), but, at the senior researcher (professor) level in particular, this is a real concern. Various measures are in place to remedy this. The age structure is somewhat heavy on researchers aged over 55. Most of the researchers at the faculty are Norwegian, but some are from other countries (mainly European).

At the Department of Information Systems, the gender balance among doctoral students is good, but only two of the permanent staff are women. The department aims to recruit three new associate professors over the next years, and will particularly address the gender balance. While recruitment is carried out internationally, mastery of Norwegian (or another Scandinavian language) is required to teach the first year of the bachelor's programme and the further education courses. Furthermore, and more importantly, the administrative language of the university is Norwegian. This leads to a certain inequality in the roles of the professors, as it is hard for non-Norwegians to assume administrative responsibilities (e.g. as study programme coordinators). The main language used in the BSc and MSc programmes is Norwegian but some courses are taught in English, while the PhD programme is more international and in English.

19.1.6 Research production and scientific quality

The Department of Information Systems is active in research as well as in various academic activities (editorships, conference chairs etc.). The department had the highest research production at the university, measured in DBH points per permanent member of staff. There is probably a link between the high overall research productivity and the successful PhD programme, the two areas of activities supporting each other.

There are four research centres at the department, two of which are inter-faculty and managed by other departments. The department's own centres, the Centre for eGovernment and the Centre for Enterprise Systems both actively publish, including in the top IS journals (FT50, ABS 3 and 4, and the so called AIS Basket of Journals). There seems to be a systematic focus on high-quality research and publications.

Assessment of scientific quality: 3 - good

19.1.7 Interplay between research and education

At the department level, the faculty allocates about 40% of time for research. All the researchers are expected to participate in teaching activities, but whether and how this applies to non-Norwegian speakers is not clear.

At the Department of Information Systems, teaching is closely linked to research. The research areas of Enterprise systems, eGovernment and eHealth contribute directly, in particular, to study programmes, also at PhD level.

19.1.8 Societal relevance and impact

The research work of the department is applied by nature and carried out in close collaboration with practice, often as engaged scholarship. This helps to ensure that the results of the research are relevant for practice, in addition to being academically rigorous (evidenced by the publication records). The impact case the group has submitted – ‘Realizing benefits from government IT investments’ – is an excellent example of this kind of collaboration, with the Norwegian public sector in this case. The case also clearly demonstrates the relevance and impact of the research conducted at the department.

The new knowledge created is disseminated as far as possible through popular media, but this is perceived as less important by the researchers in the department due to the lack of an incentive structure (i.e. negligible impact on academic careers). This is something that should be addressed.

19.1.9 Overall assessment

UiA’s Faculty of Social Sciences in general and the Department of Information Systems specifically have worked hard on achieving a good number of international publications and collaborations. Research is also strengthened by the fact that PhD students are very well integrated into the department and into the research groups. The faculty is visible and active in many forums, both locally and internationally, and there is a lot of collaboration with (local) industry.

19.1.10 Feedback

UiA faces a number of challenges related to its fairly small size and geographic location in a small city. While gender balance is considered to be important, it seems to be a very difficult issue to remedy. Although there seems to be considerable collaboration with industry, the level of external funding is rather low. The institution should focus on raising external funding, both from industry as well as institutional sources (e.g. the EU). Inefficiencies in research work caused by a lack of administrative support should be resolved.

19.2 Research group: eGovernment

Established in 2005, the research group eGovernment focuses on eGovernment, eDemocracy and ICT for development.

19.2.1 Organisation, leadership and strategies

The fairly small group consists of two full professors, one docent and two PhD students. The number of permanent members has decreased over time, evidently because of the lack of support from the university management and the internal competition for positions.

The group’s strategy is to focus on how ICT can be utilised in enacting changes in the public sector and the relationship between the public sector and society. This covers topics related to internal process changes, reorganisation, development and the implementation of digital services, as well as the use of ICT in promoting democracy.

In general, the group’s focus is on collaboration with the region and with public sector organisations. The group actively contributes to the national agenda related to eGovernment and eParticipation issues.

The group's aim is to publish in leading international journals and conferences, both in general IS journals as well as those more dedicated to the domains of eGovernment and ICT4D.

19.2.2 Research personnel

The group has not been successful in securing university level funding for new permanent staff positions, but has done quite well with respect to PhD student recruitment.

So far, four PhD students have graduated from the group, two of whom have remained in the group, first as associate professors and now as full professors.

All the five listed members are male, one docent (professor) is in the age group 50-59 years and all the others are in the 40-49 age group. All the five current members are Norwegian. The only female is a Danish professor from CBS, who is listed as an affiliated researcher. Another affiliated researcher is a retired Norwegian associate professor (male). The self-assessment mentions a postdoc fellow from Japan, but s/he is not listed elsewhere. The group seems to be highly homogenous, which gives some cause for concern.

While the senior members of the group are both nationally and internationally active, no evidence of actual mobility is provided in the self-assessment.

The PhD students are encouraged to visit partner institutions as part of their PhDs, but no actual report is provided about whether and for what lengths of time this has materialised. The students are also said to benefit from national and some international (Danish) PhD courses.

19.2.3 Research production and scientific quality

Overall, the publication records of three senior members of the group demonstrate continuous and steady, if not abundant, efforts. The choice of outlets reflects the niche nature of the group's main topics, evidenced only by some mainstream top IS journal publications. This, however, seems to be acknowledged and is something the members are working on (one paper in the second round in MISQ, which is a FT50/ABS 4* journal). Nevertheless, it must be noted that all the three senior members have solid publication records, all of them listing at least one ABS 3 publication.

Information Systems Science is inherently interdisciplinary by nature, combining knowledge of business and technology. In addition, the topics of eGovernment and ICT4D necessitate drawing on various reference disciplines (including public policy, governmental studies and development studies).

19.2.4 Networking

Especially considering its small size, the group is very active in several arenas. The members have been involved in organising national and international conferences and workshops, they serve on editorial boards of various IS, eGovernment and ICT4D journals, and they are involved in several research projects and funding applications with European network partners.

19.2.5 Interplay between research and education

The group is responsible for providing courses related to eGovernment, eParticipation and ICT4D at BA, MA and PhD levels.

19.2.6 Societal relevance and impact

The group's various dissemination and knowledge exchange activities are not documented in detail, but are evidently quite substantial. In addition to all the activities in the academic community (different eGovernment and ICT4D events, journals, networks), the group works closely with the public sector, even to the extent of influencing the national agenda.

19.2.7 Overall assessment and feedback

The University of Agder research group on eGovernment is one of the leading groups in eGovernment and ICT for development in the Nordic countries, ranked highly also at the European level. This is a good achievement for a small group. With continuous efforts and secured funding, the group has a realistic chance of becoming a very strong and internationally recognised research group. This goal could benefit from increasing the size of the group and its diversity, in terms of gender, age, nationality and PhD training (i.e. also people with PhDs from other institutions than the University of Agder).

The University of Agder research group on eGovernment is one of the leading groups in eGovernment and ICT for development in the Nordic countries, recognised also at the European level in its narrow niche area. This is a good achievement for a small group. The group's research output has mainly focused on the journals in the specific area (that are typically not the most highly ranked), but there is clearly an increasing inclination to also publish in the top IS journals. With continuous efforts and secured funding, the group has a realistic chance of becoming a very strong and internationally (beyond the Nordic countries) recognised research group.

Assessment of research group: 3 – good

19.3 Research group: Centre for Enterprise Systems

The research group Centre for Enterprise Systems was established in 2000 and reorganised as a research centre in 2007. Since 2000, the focus has shifted slightly from a broader view on business utilisation of IT to more specific issues related to the implementation and benefits of enterprise systems. In addition to research, the group is also involved in the department's MSc programme in Information Systems (IS).

19.3.1 Organisation, leadership and strategies

Professor Dag Håkon Olsen is the director (since 2007) of this fairly small research group of five researchers and, currently, three PhD students (the number can vary). The role and responsibilities of the director are not fully clear from the self-assessment report.

The group's research is well focused on the topic of enterprise systems in the discipline of IS. The stated strategy is to publish in leading IS journals and conferences.

Originally (in 2001–2002), the group was funded by the EU and a little later (2007–2009) by the Competence Development Fund of Southern Norway. Recently, the group's EU applications (as part of different research consortia) have not been successful. The centre has, however, participated in two externally funded projects, most recently in 2011–2013.

The group mainly contributes to the University of Agder's goals by providing research-based input to the development of the MSc programme in IS.

The group reports that the University of Agder provides the centre with adequate research infrastructure and funding for developing applications to the Research Council of Norway and EU programmes.

19.3.2 Research personnel

Of the eight people listed, the three PhD students work 100% for the Centre for Enterprise Systems, the senior researchers have either a 40% or 10% involvement in the centre.

Recruitment and career development are not conducted in the centre but at the department level. The same applies to the recruitment of PhD students, but the centre is allocated PhD students based on the research proposals of those applying to the department's PhD programme. There are no postdoctoral fellows in the group.

The senior members of the group have supervised several PhD students and have been involved in PhD courses, including a course on the specific research issues in enterprise systems.

While the overall gender balance is reasonable (five males and three females), it is notable that of the five senior members, only one is female. All the senior researchers are Norwegian nationals. Nor does there seem to be much diversity in age among the members of the group, with all senior researchers aged between 50 and 59 years. The three PhD students are also more mature, perhaps with (valuable as such) industry experience between their MSc and PhD studies.

The mobility of the group is somewhat weak, with no PhD students participating in international exchange programmes (excluding one semester visit by one student), and research collaboration is primarily at the national level. This is an area that the group could strengthen.

19.3.3 Research production and scientific quality

The main research topic is utilisation of IT in organisations, more specifically implementation of enterprise systems in organisations, competence requirements for digitalisation, business process management, knowledge management, e-collaboration and cloud computing. Members of the group have published articles in this area, both in journals and in international conferences. The most notable and novel contribution to the discipline is perhaps the introduction of a new pedagogical model and insights into teaching enterprise systems in university-level education.

Information Systems Science is inherently interdisciplinary by nature, combining knowledge of business and technology. In addition, the group incorporates pedagogical research into its studies and publications.

Overall, the group's research productivity is very good, with some variation among the members. There is some evidence of increased activity from 2007–2011 to 2012–2016, in terms of the number of publications. Even though the members of the group have only published one paper in the very top journals in the field, the number of high-quality publications is notable.

19.3.4 Networking

The members of the group are engaged in collaboration with researchers in other Norwegian institutes and the ERCIS network (European Research Centre for Information Systems). Apart from collaborations on several EU funding application consortia, there is no evidence of more systematic or regular collaboration, particularly at the international level.

19.3.5 Interplay between research and education

The group's research contributes to the educational activities of the university by improving the quality and relevance of the MSc programme curricula. There is a clear link between the research conducted and the study programme.

The group reports that the programme is highly relevant in practice, as demonstrated by the fact that the students who take the programme are quickly recruited, most of them even before they graduate.

19.3.6 Societal relevance and impact

The research conducted by the Centre for Enterprise Systems group is highly topical and relevant both for academia and for practice. Enterprise systems are complex socio-technical systems that are not yet fully understood, in terms of the challenges as well as potential benefits.

The self-assessment prepared by the group does not include any information on specific knowledge exchange or dissemination activities, except for publishing in international peer-reviewed journals and conferences.

19.3.7 Overall assessment and feedback

Overall, the group produces focused and scientifically significant research, as demonstrated by the three articles included in the evaluation. Two of the three articles have been published in very high quality IS journals (ABS rating 3). In general, there is evidence of continued research output in the form of journal publications, conference papers and book chapters. Apart from the most recent PhD, all the senior members of the group have published at least one article in a top-level IS journal in the past ten years. To be able to gain real momentum, this small group should try to secure external funding and grow the number of researchers contributing to the results.

Assessment of research group: 3 - good

20 University of Agder, School of Business and Law

University of Agder, School of Business and Law							
Units included in the evaluation of economic-administrative research	- Dept. of Economics and Finance - Dept. of Management - Dept. of Work-life and Innovation			Listed researchers	42		
				Listed research groups	0		
				No. of researchers in listed research groups	0		
Other units of the faculty (institution)	- Dept. of Law			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	3/-	2/1	-/-
				Total per year	3	3	-
R&D expenditures and sources of funding (1000 NOK)				No. of positions announced / No. of qualified applicants per year			
	2014	2015	2016				
Funding of the institution				PhD positions	5/124	1/4	0/0
Total expenditures	64 054	77 142	85 239	Post.doc positions	0/0	0/0	0/0
Types of funding				Permanent positions	1/2	7/18	7/8
Core funding from the RCN	57 461	63 741	75 462	Education			
External funding, RCN	3 917	2 048	2 120	Study programmes BA level - Business administration - Law - Marketing and management - Tourism management			
External funding EU	0	0	0	Study programmes MA level - Business administration - Accounting and auditing - Innovation and knowledge development			
External funding, other sources	8 629	13 648	9 164	Other The UiA School of Business and Law was established as a faculty with effect from 01.01.2015, earlier a part of the faculty of Economics and Social Sciences.			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

20.1 Economic-Adm. research at the institutional level

20.1.1 Organisation, leadership and strategy

The University of Agder's (UiA) School of Business and Law was established as a faculty in 2015, prior to which it was under the Faculty of Economics and Social Sciences. The main reason for it becoming a separate faculty was to enable it to apply for the prestigious AACSB accreditation. Its staff comprises 79 scientific and 13 administrative staff. The school is managed by the dean and a faculty director, and it has four departments (Economics and Finance, Management, Work-life and Innovation, Law), each with a department head. The school's management group consists of the dean, faculty director and the department heads. The board of the University of Agder serves as the highest decision-making authority on issues relating to the university, while the faculty board (chaired by the dean) makes decisions concerning the business school. The dean is responsible for the overall management, including the general scholarly management, educational management and research management, and the faculty director handles matter related to administration and staff support. The faculty and students are included in the governance and represented on the school's board and various committees.

The school's strategy is in line with the overall strategy of the university. The mission to 'co-create knowledge by applying responsible, innovative and international perspectives' is implemented through education and research. In addition to education and research, the school's strategic goals include issues related to outreach and organisational culture and work environment. To strengthen the international collaboration, the school has established an international committee to help in developing a long-term strategy.

20.1.2 Institutional follow-up of previous evaluations

Selected staff members from the Department of Economics and Finance were evaluated in the RNC's 'Economic research in Norway' evaluation in 2007. The most significant change since then are reported to be related to the school's recruitment policy, with it now only recruiting full and associate professors. This together with a stronger emphasis on research quality has evidently strengthened the faculty's research capacity and capability. The PhD programme has also been restructured since 2007, and the study programmes have been redesigned at all levels.

20.1.3 Resources and infrastructure

The proportion of external funding was 13.2% of total expenditure in 2016 (20.3% in 2015). The school has established a separate R&D committee to focus on increasing external funding.

The school reports set of databases (e.g. a global dataset of microfinance institutions and a dataset of entrepreneurial intentions) as an integral part of the research infrastructure. A set of laboratories (e.g. in entrepreneurship) in education provide potential research questions and projects. Both seem to be well used and useful.

20.1.4 Research environment

With respect to research, emphasis is put on collaboration with international partners as well as businesses, state institutions and civil society. The school also actively collaborates with other Norwegian research institutions at the national level, and collaborates closely with municipalities and industry at the regional level.

20.1.5 Research personnel

A PhD programme committee has been established to ensure that the recruitment of candidates matches supervisor capacity and competence. The PhD programme consists of coursework, writing the thesis and a public defence. UiA participates in the National Research School of Business Economics and Administration and the Norwegian Research School in Innovation, which offer students opportunities to participate in various PhD courses. This seems to be a very useful addition to the courses offered by the university and the school. In addition to building their own networks, the students are expected to participate in ongoing research projects in the research group most relevant to them. Students' progress is monitored through annual reports and presentations.

It is hoped that the mobility of PhD students will increase through further exchange agreements (three so far, goal of ten for the 2017/2018 academic year).

The university has a policy and an action plan for gender equality and integration (focusing on a wide range of gender, ethnicity, disability, harassment and sexual orientation issues) and all faculties are to comply with the policy. In order to achieve better gender equality among the scientific staff, the school has made efforts to increase the number of female professors.

The school has advertised 15 new full-time positions in the past three years. The professors recruited have mainly come from other Norwegian institutions, but they have also come from international institutions. The current strategy is to recruit internationally. It is hoped that this, together with the policy to only recruit full or associate professors, will strengthen research capacity and capability, and an increase in research activity and the number of publications has been reported. However, the policies seem somewhat inconsistent: while there is a large and effective international job market at the level of assistant professor, it can be very hard to convince senior researchers to move, especially across borders and to a fairly remote, small city. Hiring internationally and at the senior level do not seem to be an optimal combination.

UiA has been awarded the 'HR Excellence in Research' brand in 2013, and the university adheres to the Code of Conduct principles, with a further action plan in place.

20.1.6 Research production and scientific quality

For the past three years, the research faculty's output has been over 50 peer-reviewed journal articles, book chapters and monographs annually. These also include publications in high-impact outlets, such as *International Business Review* and *Journal of Management Studies*.

Research is conducted in five research groups: Accounting and finance, Emerging markets, Strategy, innovation and entrepreneurship, Centre for advanced studies in regional innovation strategies, and Project Management. The groups are all mid-sized, with between 11 and 18 researchers in each group.

The school aims to enable the staff members to concentrate their teaching activities in one semester, leaving the other semester free for research. This appears to be an effective policy. High publication productivity is rewarded with an additional 30% research time (default 10%). Monetary bonuses are also awarded for contributions to top ranking publications. While productivity in terms of quantity is at a good level, its quality is not quite as good: only 10% of the publications are ranked at level 2 (this is below the average of 19% for this field). The allocation of research time should have a strong focus on quality, and not only on publication points (quantity).

Assessment of scientific quality: 2 - fair

20.1.7 Interplay between research and education

The school has implemented a process for allocating time between research, teaching and other activities. The default share of research time is 10%. All staff members develop a work plan with their head of department. The breakdown of hours for different tasks at an annual level is a rigorous process, but is likely to be somewhat artificial and not necessarily particularly useful, as a lot of researchers' work (including writing articles, attending conferences etc.) is not carried out within traditional 'office hours'. A more transparent system for the allocation of research time could be considered.

The educational programmes are run together at the school level, without departmental 'ownership', but the different disciplines contribute to different programmes. The school aims to integrate the ongoing research efforts and projects into teaching, and the links between research and the study programmes is reported to be strong. All the research groups contribute to BA and MA level study programmes, and two of the five groups also contribute to PhD programmes. Why the other three research groups do not have links to the PhD programmes is somewhat puzzling, but this is not elaborated on in the self-assessment.

Students are encouraged to become involved in research. MSc students are recruited through external research grants, and research assistants are recruited through internal funding that the faculty can apply for.

20.1.8 Societal relevance and impact

Several research groups are reported to contribute to the key areas defined by the Norwegian Government, especially on the themes of entrepreneurship, innovation, regional innovation systems, knowledge management, crowd-funding, micro finance and business performance in emerging markets. The institution also reports on an impact case where a researcher worked together with a journalist and eventually stopped the sale of a financial product to private consumers that gave a very low return. This can be considered as evidence of high societal impact.

20.1.9 Overall assessment

The institution is quite strong in terms of regional contacts and collaboration, and societal impact. In terms of quantity, the research output is reasonable. However, quality needs to be addressed. The PhD programmes are quite international, but internationalisation at the faculty level requires more work. The institution is close to achieving AACSB accreditation, which will probably also be beneficial to recruitment.

20.1.10 Feedback

One of the two main recommendations to the institution is to strengthen the research output of the faculty by

- 1) increasing the focus on quality in addition to quantity. This requires new incentive structures for the allocation of research time and e.g. financial rewards for top level publications. A more formal sabbatical system could also prove helpful.
- 2) strengthening the faculty and its diversity by focusing on junior level recruitment internationally. The career paths also need to be clarified, preferably closer to international standards, for the positions to also be attractive to non-Norwegian scholars. Using more English also in administration – in addition to teaching – should be considered.
- 3) The other recommendation is to devote further attention to increasing the level of external funding.

21 University of Oslo, Faculty of Social Sciences

University of Oslo, Faculty of Social Science							
Units included in the evaluation of economic-administrative research	- TIK Centre for Technology, Innovation and Culture			Listed researchers	11		
				Listed research groups			1
				No. of researchers in listed research groups			20 (21 CVs)
Other units of the faculty (institution)	- Dept. of Economics - Dept. of Sociology and Human Geography - Dept. of Social Anthropology - Dept. of Political Science - Dept. of Psychology - ARENA Centre for European Studies			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	1/1	1/2	0/3
				Total per year	2	3	3
				No. of positions announced / No. of qualified applicants per year³¹			
R&D expenditures and sources of funding (1000 NOK)							
	2014	2015	2016				
Funding of the institution				PhD positions	2/4	4/7	2/4
Total expenditures	516 013	519 699	594 049	Post.doc positions	1/2	1/1	2/4
Types of funding				Permanent positions	-/-	1/1	-/-
Core funding from the RCN	407 822	441 167	460 585	Education			
External funding, RCN	69 307	65 166	77 179	Study programmes BA level			
External funding EU	9 527	17 965	24 203	Study programmes MA level - Technology, Innovation and Knowledge - Society, Science and Technology in Europe (ESST)			
External funding, other sources	23 791	25 732	31 936	Other			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

³¹ For the purposes of SAMEVAL, we were informed by the RCN that we could define 'qualified applicants' as those applicants that were recommended for hiring by the body that has the power to do so (short list/ 'innstilte søkere'). The number of formally qualified applicants is much higher, but we do not identify formally qualified applicants as part of the evaluation process.

21.1 Economic-Adm. research at the institutional level

21.1.1 Organisation, leadership and strategy

The Faculty of Social Sciences at the University of Oslo has five disciplinary departments and two centres or units. Some of the units also have their own centres and each of the units has its own scientific head. They also have their own administration, each led by a head of office. A board governs the faculty, headed by a dean.

Each department is managed by a head of department who reports to the dean. The vice-dean of research is responsible for the development of the PhD programme, while the pro-dean of education is responsible for the BA and MA programmes.

The PhD programme council consists of an academic from each discipline and two representatives for the PhD students at the faculty. This council is responsible for the PhD study programme plan, including programme learning outcome descriptions and the programmes' structure.

The strategy plan for 2017–2019 is only available in Norwegian, but is summarised as follows: the faculty's main research aims are to encourage basic research as well as applied research, theoretical and empirical research, of high quality and relevance. The faculty shall be at the forefront of international research in some areas and leading in Europe in many more. The faculty's thriving research environment will attract top researchers.

In 2008, the faculty defined six prioritised research areas: Social equality and economic performance: the Nordic model, Democracy and governance, Globalisation and localisation, Social inequality, and Cognitive neuroscience (the latter falling outside the remit of this evaluation). Each of these areas has been productive, has had impact and has attracted significant external funding.

Within the Horizon 2020 framework programme, the faculty is currently participating in ten projects, of which they lead six, and researchers are holders of a total of nine ERC grants. They want to increase their participation in EU projects, and in order to achieve this, they are building administrative competence to support EU applications and grants, by, among other things, appointing a full-time EU administrator and working proactively to match researchers with appropriate calls.

No major organisation changes are either underway or planned at unit level. However, three changes have recently been made to how researchers are encouraged to work: One is to plan in the middle to long-term, in terms of applying for grants and establishing research networks, the second is to think creatively about the possibilities for initiating novel cross-disciplinary research, and the third is to think carefully about the applications of their research in terms of impact and innovation.

Funding is primarily from the Norwegian Government, with some additional external funding from public and private sources. EU funding is limited.

21.1.2 Institutional follow-up of previous evaluations

There have been evaluations in 2002, 2007 and 2011, and the different departments have acted on the recommendations.

After the evaluation of Geography research in Norway in January 2011, the Research Council of Norway (RCN) announced the funding (ISP projects) to establish thematic research networks for the period 2013 to 2015. The Department of Sociology and Human Geography (ISS) has been involved in three of the four networks – network of political geography, economic geography and mobility research. There has been significant activity in all the networks, which has strengthened the relations between

institutions and researchers. The ISP projects have contributed significantly to fulfilling the recommendations made in the 2011 evaluation report.

The evaluation report on Sociology in 2011 recommended strengthening the discipline both theoretically and methodologically. The faculty established theory and methodology committees and revised its theory and methodology courses in line with the recommendations. They now offer solid theoretical and methodological training at both undergraduate and graduate level, and require theoretical and methodological competence of all new permanent positions. National collaboration in the discipline has primarily taken place within each of the ISP projects.

The evaluation report on Social Anthropology, also in 2011, recommended to ‘Maintain the ethnographic focus, but be more theoretically ambitious so as to optimise the value and impact of the ethnographies.’ In dialogue with the RCN, the department developed a follow-up strategy. The department was awarded an ISP project (Anthropos and the Material: Challenges to Anthropology). The goal was to strengthen the theoretical development of the discipline and to increase the number of publications in major international journals. Three research groups were funded, and they have been active throughout the project period, which ended in 2016. The strategy has, among other things, resulted in new ideas, perspectives and new research collaborations across old research groups. In the QS World University Ranking, social anthropology at UiO has climbed fast and is now number 37 in the world, the highest ranking of all the departments at the University of Oslo.

Economics was evaluated in 2007. The report mentioned ‘It is among the best departments in the Nordic countries and has a clear international profile and standing. The main challenges are to strengthen research within its fields of specialization, to solve the recruitment problem and to improve its PhD programme.’ The research quality is still high and the number of publications in the best journal have increased since the evaluation. There are two formal research groups, ESOP and OFS. The inflow of external funding has resulted in increased activity and improved quality along several dimensions. International recruitment has a high priority at the department and, over the past ten years, international recruitment has become the norm. The PhD programme has seen a moderate increase in the number of admitted students.

Political Science was evaluated in 2002. The evaluation panel described the scientific community at the department as internally fragmented. To follow up the evaluation report, the department applied for a Strategic Institute Project (IPS project) from the RCN (2004–2008) with the aim of strengthening existing and promoting new collaborative constellations internally at the department. The project brought people together and resulted in numerous co-authored publications.

21.1.3 Resources and infrastructure

The University of Oslo provides diverse and powerful IT resources to support research activities. Researchers at the University of Oslo receive help to store and secure all the data needed to conduct their research. For storing big amounts of data, they can apply the use of NorStore resources, a Norwegian national data storage project.

Departments can use their resources according to their own needs.

21.1.4 Research environment

The faculty has substantial national and international research collaborations, and the number of applications for externally-funded projects increases each year. The faculty encourages employees to participate in public committees and other forums that contribute to change and innovation.

21.1.5 Research personnel

Career planning mainly centres on encouraging recently-appointed lecturers to fulfil the criteria for promotion to full professorships. The faculty has recently refined the guidelines for promotion, by clarifying the scientific requirements.

The faculty also encourages – and facilitates – grant applications for all researchers, thereby helping them to plan their research over the medium to long term.

Mobility is encouraged for all faculty staff members. Mobility and career planning are discussed with PhD students employed by the faculty at annual appraisal interviews. All PhD students are encouraged to spend a study and research period abroad during their PhD training.

The faculty's summer school at PhD level, Oslo Summer School in Comparative Social Science Studies, is an important factor when it comes to international interaction and collaboration. Participation in research schools, for example the Norwegian Research School in Innovation and the Research School on Peace and Conflict, with an international component such as international staff or members, exposes PhD candidates to international networks.

In line with the University of Oslo's employment policies, all hiring of new staff at the faculty is subject to a moderate gender bias by stating in advertisement texts that the university aims to achieve a balanced gender composition in the workforce.

The faculty encourages female postdoctoral fellows to attend the University of Oslo's mentoring programme. Female researchers who are permanent members of staff are given first priority for research leaderships and other career building programmes at the University of Oslo.

In 2016, 33% of professors, 49% of assistant professors, 48% of postdocs, and 54% of PhD research students were women. This is slightly better than the panel average.

21.1.6 Research production and scientific quality

The Faculty of Social Sciences at the University of Oslo does not have a department or organisational unit that is entirely devoted to Economic-Administrative research. However, the faculty's Centre for Technology, Innovation and Culture (TIK) has a research group in innovation studies.

All information about research is also found in the TIK evaluation. The following only applies to the TIK research programme, and not to the faculty.

TIK's innovation studies group is among the strongest research environments in the field in Norway. Internationally, its ambition is to be among the leading units in its field.

TIK's innovation research is primarily intended for an international academic audience, and it is typically published in prestigious academic outlets in the field – such as the top journal in the field of innovation studies, *Research Policy*, among many others. Much of this research has high international visibility and impacts in the academic community (e.g. as measured in terms of citations statistics and other bibliometric indicators).

However, although they publish in top field journals, they do not have publications in the absolute top journals in economics and management (corresponding to e.g. ABJ4* journals). Moreover, their research productivity (publication points per researcher) is below the average for the panel. This might be partly due to the age structure with many junior researchers.

The group also has extensive collaboration across disciplinary boundaries, particularly within the area of renewable energy transitions and innovation in life science and medicine. Research partners are

within odontology, medicine, technology and natural sciences at the University of Oslo and elsewhere (NTNU, Nofima). The innovation group has a tradition of collaborating with policymakers as well as private industry.

TIK's innovation group is highly visible in the world's leading scientific journal in innovation studies, *Research Policy*, for example through co-editing three recent special issues (2011, 2012 and 2016) and in other articles. The leading handbook on innovation studies, published by Oxford University Press, was edited by Professor Jan Fagerberg. The innovation group has steadily increased the number of publication points per capita since 2013 and increased the share of level 2 publications in the Norwegian system in the same period. The group's working paper series, organised within REPEC/IDEAS, has a high number of downloads.

Regarding the strategy aimed at increasing the quantity and quality of publications, TIK has recently introduced a new publication bonus system to provide researchers with a stronger incentive to publish internationally. In addition, a 'publication workshop' is organised once every semester to discuss the staff's work in progress leading to journal publications.

Assessment of scientific quality: 4 - very good

21.1.7 Interplay between research and education

The innovation group's research profile is multidisciplinary and collaborative. Almost all research activities involve collaborating with innovation researchers in other countries. The group has extensive collaboration across disciplinary boundaries, particularly within the area of renewable energy transitions and innovation in life science and medicine. It has a tradition of collaborating with policymakers as well as private industry. The innovation group currently has one industry PhD fellow and two public sector PhD candidates.

The group is part of the NORSI national research school in innovation studies, where all the senior group members are involved as lecturers and in other roles (chairman of the board, board member).

21.1.8 Societal relevance and impact

Since much of TIK's research in innovation studies is project-based and externally funded, it is natural that it has a strong component of dissemination and user-involvement. In fact, most funding programmes that TIK participates in (such as those of the Research Council of Norway, or the EU Horizon 2020 programme) require applicants to make specific and feasible plans for the dissemination and involvement of other academic partners, stakeholders, policymakers and/or industry users. As such, all research projects at TIK have specific dissemination and user involvement plans, which are regularly monitored and followed up by the funding agencies that manage these projects.

Group members make a large number of public/non-academic presentations every year and publish occasional popular science articles. Formal project collaborations are in place with policymakers in the Research Council of Norway and various ministries and with private firms.

The group has a strong external collaboration profile with non-academic partners. Group members make a large number of public/non-academic presentations every year and publish occasional popular science articles.

The large-scale centre OSIRIS (the Oslo Institute for Research on the Impact of Science) is particularly important in the group's external collaboration. OSIRIS, funded for eight years as a centre of excellence by the RCN, involves significant collaboration with policy actors in Norway and other countries.

The faculty encourages employees to participate in public committees and other forums that contribute to change and innovation, such as public debates, internal and external seminars, public committees and expert groups, acting as expert witnesses in court and preparing teaching materials and reports.

Group members make a large number of public/non-academic presentations every year and publish occasional popular science articles. Formal project collaborations are in place with policymakers in the Research Council of Norway and various ministries and with private firms.

Researchers already have substantial national and international research collaborations, and the number of applications for externally-funded projects increases each year.

Impact case: TelenorR

Professor Magnus Gulbrandsen initiated TIK's innovation group's first collaboration project with Telenor, which started in early 2012 and has been ongoing since. Other research units in Norway and abroad have also been involved. For TIK, Telenor proved an interesting empirical arena for innovation theories and controversies.

TIK's first measurement project showed that the actual innovation expenditure in Telenor was much higher than that officially reported in the research and CIS surveys. This had a powerful symbolic (and perhaps to some extent political) impact on Telenor, but it also led to changes in data gathering practices and innovation management that moved Telenor up as an 'industry leader' in the DJSI. The impact case concerns only one company – but a very large one.

More direct impact can be seen from the culture survey, which clearly demonstrates that innovation is emphasised less in the company than all other aspects that were defined as important.

The impact of the research has been very important: the company has shifted its innovation strategy, strengthened the assessment of innovation results and capabilities in the follow-up of individual personnel, improved its innovation management and the ranking of this aspect in the Dow Jones Sustainability Index, and committed to new R&D and innovation partnerships with an emphasis on how Telenor can be a driver of innovation and entrepreneurship in Norway.

21.1.9 Overall assessment

The University of Oslo has a solid modern infrastructure, a unique 'big data' infrastructure, for storage and analysis appropriate to the social sciences. It also has robust recruitment processes leading to the appointment of highly-qualified researchers.

The Faculty of Social Sciences is very successful, as measured by ERC grants, and is increasingly successful at obtaining competitive grants, but it seems to depend primarily on what the TIK Centre can produce.

The quality of the TIK publications is very high, but the challenge lies in the near future, when their star researchers/professors retire.

21.1.10 Feedback

The Faculty and TIK face two urgent problems: Finances and Succession.

A real reduction in government funding, said to be permanent, creates the need to look for more external funding in an increasingly competitive environment, as other universities and research centres will experience the same financial issues. The TIK centre seems to be the 'cash cow' but is in a

precarious situation because the top 'star' researchers are soon to retire. It is not made clear how the succession has been planned, and a clear strategy is needed.

The faculty, and TIK, might think of being more active in international projects and in start-up grants.

If they want to be leading internationally, a requirement is publications in top journals.

21.2 Research group: Centre for Technology, Innovation and Culture

21.2.1 Organisation, leadership and strategies

The Faculty of Social Sciences at the University of Oslo does not have a department or organisational unit that is entirely devoted to Economic-Administrative research. However, the faculty's Centre for Technology, Innovation and Culture (TIK) has a research group in innovation studies.

TIK Centre for Technology Innovation and Culture was established in 1999 as an interdisciplinary research centre. The group used to be the main hub for innovation studies in Norway, but this is no longer the case due to the strong build-up of capacity at many other universities over the past decade.

Three main thematic areas are given priority. The first is the economics of innovation, which studies the economic determinants and impacts of innovation and how they differ across countries, regions, sectors and firms. The second is related to systems of innovation, the process of transitions and their structural changes, and the interplay between public policies and private sector innovative strategies – with a special emphasis on natural resources and renewable energy innovations. The third main thematic area is tied to how innovation and research activities are organised in networks and collaborative efforts within specific industries and other settings.

All three thematic areas have a common focus on the creation and diffusion of innovation in firms and public organisations. All three main thematic areas prioritised at TIK within innovation studies have a number of ongoing externally funded projects that explicitly address some of the priority areas of the Long-term plan for research and higher education.

TIK's research in innovation studies is highly dependent on external funding. More than 80% of the group's funding is external, which generates high work pressure and other challenges. Most of the external projects are funded by Norwegian agencies such as the Research Council of Norway and the Ministry of Education and Research.

21.2.2 Research personnel

During the past five years, TIK's staff in innovation studies has expanded considerably, particularly through a large number of new externally funded research projects. At present, the staff consists of nearly 30 researchers. The group is one of the main hubs for innovation studies in Norway, and it has a strong scientific standing and societal impact.

The group has four tenured staff, two of whom are close to retirement age, and it is not clear how succession will be organised. The excel sheet lists five permanent members of staff. In addition, there are three (more senior) temporary members of staff, including Fulvio Castellaci, who is the director of the centre. TIK currently has 15 PhD students in Innovation Studies. The PhD in Innovation Studies is a track in the faculty's PhD programme. At present, about 30% of the staff are foreign researchers.

TIK's innovation studies staff currently has only four tenured positions (professor level), and there are no possibilities to increase this number due to limited core grants from the faculty.

The assessment uses the word 'mismatch' when describing staff: on the one hand, there is an increasing number of junior researchers (in need of supervision) and of externally funded research projects (that require coordination and management); on the other hand, there is only a small and stable core of tenured senior researchers who can carry out these supervision and coordination activities. TIK's tenured staff in innovation studies do not have sufficient capacity / time to carry out the activities that TIK's increasing activity level demands.

In order to overcome this limitation, TIK is developing strong links and collaborations with other units in the same and in neighbouring fields of research. Innovation studies represent a highly multidisciplinary and collaborative field. Almost all the research activities in this field at TIK involve collaborating with innovation researchers in other countries.

PhD students and postdoctoral fellows rarely participate in international exchange programmes, but this is to be given emphasis in TIK's next strategic plan period.

The field of innovation studies does not present gender issues or imbalances. TIK's staff in innovation studies currently has a quite balanced representation of male and female researchers (approx. 50% each). However, there is only one woman among the permanent and temporary staff (i.e. those who are not PhD students or postdocs).

21.2.3 Research production and scientific quality

TIK's innovation studies group is among the strongest research environments in its field in Norway. Internationally, its ambition is to be among the leading units in its field.

TIK's innovation research is primarily intended for an international academic audience, and it typically publishes in prestigious academic outlets in the field – such as the top journal in the field of innovation studies, *Research Policy*, among many others. Much of this research has high international visibility and impacts in the academic community (e.g. as measured in terms of citations statistics and other bibliometric indicators).

The group also has extensive collaborations across disciplinary boundaries, particularly within the area of renewable energy transitions and innovation in life science and medicine. Research partners are within odontology, medicine, technology and natural sciences at the University of Oslo and elsewhere (NTNU, Nofima). The innovation group has a tradition of collaborating with policymakers as well as private industry.

TIK's innovation group is highly visible in the world's leading scientific journal in innovation studies, *Research Policy*, for example through co-editing three recent special issues (2011, 2012 and 2016) and in other articles. The leading handbook on innovation studies, published by Oxford University Press, was edited by professor Jan Fagerberg. The innovation group has steadily increased the number of publication points per capita since 2013, and increased its share of level 2 publications in the Norwegian system in the same period. The group's working paper series, organised within REPEC/IDEAS, has a high number of downloads.

Regarding the strategy aimed at increasing the quantity and quality of publications, TIK has recently introduced a new publication bonus system to provide researchers with a stronger incentive to publish internationally. In addition, a 'publication workshop' is organised once every semester to discuss the staff's work in progress leading to journal publications.

21.2.4 Networking

The innovation group's research profile is multidisciplinary and collaborative. Almost all research activities involve collaborating with innovation researchers in other countries. The group has extensive collaboration across disciplinary boundaries, particularly within the area of renewable energy transitions and innovation in life science and medicine. It has a tradition of collaborating with policymakers as well as private industry. The innovation group currently has one industry PhD fellow and two public sector PhD candidates.

The group is part of the NORSI national research school in innovation studies, where all the senior group members are involved as lecturers and in other roles (chairman of the board, board member).

The group has a strong external collaboration profile with non-academic partners. Group members make a large number of public/non-academic presentations every year and publish occasional popular science articles.

The large-scale centre OSIRIS (the Oslo Institute for Research on the Impact of Science) is particularly important in the group's external collaboration. OSIRIS, funded for eight years as a centre of excellence by the RCN, involves significant collaboration with policy actors in Norway and other countries.

The faculty encourages employees to participate in public committees and other forums that contribute to change and innovation, such as public debates, internal and external seminars, public committees and expert groups, acting as expert witnesses in court, and preparing teaching materials and reports.

Group members make a large number of public/non-academic presentations every year and publish occasional popular science articles. There is formal project collaboration with policymakers in the Research Council of Norway and various ministries and with private firms.

Researchers are already involved in substantial national and international research collaboration, and the number of applications for externally-funded projects increases each year.

21.2.5 Interplay between research and education

Innovation studies researchers at TIK regularly teach and supervise students taking the centre's two master's programmes: Technology, Innovation and Knowledge (TIK, 2-year master's degree), and Society, Science and Technology in Europe (ESST, 1.5-year master's degree).

These master's programmes enrol 30 new students every year, which are selected from a total of around 400 applicants

Master's students are involved in staff research in two ways. Firstly, students are given the opportunity to write their master's theses on topics that are related to some of the ongoing projects at TIK. This greatly facilitates the students' work in defining a topic of interest, an original research question and obtaining access to data and documents of relevance with the support of the project team and framework. Secondly, a few selected students are invited to work part-time on some of TIK's externally funded projects. Every year, about 10% of TIK's master's students work at the centre as part-time research assistants, at the same time as they work on their master's theses.

21.2.6 Societal relevance and impact

Since much of TIK's research in innovation studies is project-based and externally funded, it is natural that it has a strong dissemination and user-involvement component. In fact, most funding programmes to which TIK applies (such as those of the Research Council of Norway, or the EU Horizon 2020

programme) require applicants to make specific and feasible plans for dissemination and involvement of other academic partners, stakeholders, policymakers and/or industry users. As such, all research projects at TIK have specific dissemination and user involvement plans, which are regularly monitored and followed up by the funding agencies that manage these projects.

Group members make a large number of public/non-academic presentations every year and publish occasional popular science articles. There is formal project collaboration with policymakers in the Research Council of Norway and various ministries and with private firms.

21.2.7 Overall assessment and feedback

The innovation group, though small, has considerable impact, in research, education and society. It has top researchers and top publications.

Two pressing issues seem to be the succession policy on the one hand, as two of the founders and highly productive professors are nearing retirement, and on the other hand funding, as public funding will decrease.

The group has national and international prestige, and could apply for more support from the faculty. There is for example no project management system or support at the faculty, and there is no faculty co-funding of projects even where this is required beyond the results-based component of the group's basic funding.

The group is international and its everyday working language is English, which means it could attract both international projects/funding and international researchers. There is however no indication of what the strategy to achieve these goals might be.

Opening up internationally, as planned with more exchange programmes for PhD students, is a good step in that direction, but more would need to be done.

Assessment of research group: 4 - very good

22 University of Stavanger, Faculty of Social Sciences

University of Stavanger, Faculty of Social Sciences							
Units included in the evaluation of economic-administrative research	- UiS Business School - Norwegian School of Hotel management			Listed researchers	102		
				Listed research groups	4		
				No. of researchers in listed research groups	75 (73 CVs)		
Other units of the faculty (institution)	- Dept. of Social Studies - Dept. of Media, Culture and Social Sciences			Training, recruitment and academic positions			
					2014	2015	2016
				No. of PhD graduated at the institution per year			
				Male/Female	2/1	-/-	2/3
				Total per year	3	-	5
				No. of positions announced / No. of qualified applicants per year			
R&D expenditures and sources of funding (1000 NOK)							
	2014	2015	2016				
Funding of the institution				PhD positions	1/3	5/10	9/68
Total expenditures	168 731	180 566	197 351	Post.doc positions	0/0	1/1	4/9
Types of funding				Permanent positions	3/4	7/19	2/7
				Education			
Core funding from the RCN	155 439	169 810	188 984	Study programmes BA level - Tourism management, Hotel management, Auditing & accounting, Business administration,			
External funding, RCN	7 984	12 984	10 178	Study programmes MA level - International hospitality management, Business administration, accounting & auditing, and Executive master of service management and Executive MBA			
External funding EU	4 512	2 182	4 605	Other			
External funding, other sources	10 887	13 349	11 605				

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

22.1 Economic-Adm. research at the institutional level

22.1.1 Organisation, leadership and strategy

The Faculty of Social Sciences at the University of Stavanger is a multidisciplinary faculty and spans a number of fields such as tourism and hospitality, journalism, political sciences, sociology, societal safety, law, business administration, accounting & auditing, social work and child care.

There are three faculties altogether, and the Faculty of Social Sciences has five subject-based departments, two research centres and one research network. Research is organised within and across departments and centres. Only four of the departments are submitted for this review. The figures for the four departments are 186 academics, 46 administrators and 3,577 students.

Because of its increasing size, the University of Stavanger is currently undergoing an organisational development process where the Faculty of Social Sciences will be divided into three new faculties. The two departments UiS Business School and the Department of Health Studies will be faculties in their own right from 1 August 2017, while the other three departments will remain under the Faculty of Social Sciences.

Funding is mainly from the Norwegian Government, but external public and private funding are also well developed. Increasing external funding and building research potential is a main responsibility throughout the system, both at the faculty and at the department/centre level. Priorities are to increase external funding and strengthen research through PhDs and postdocs.

22.1.2 Institutional follow-up of previous evaluations

The University of Stavanger was established in 2005, and the faculty has participated in two evaluations by the RCN since then – one on Sociology in 2010 and one on Economics in 2007. The follow-up has primarily focused on developing (interdisciplinary) research groups within the framework of these areas, formally supported by Research Area Programmes (RAP).

Since 2008, the University of Stavanger has introduced Research Area Programmes. In these programmes, researchers from different departments/centres work together with other national and international members to develop and enhance research activities within a given topic.

The RAP initiative emerged from the RCN sociology evaluation in 2010. No details of feedback are provided, or of other actions taken.

22.1.3 Resources and infrastructure

There seems to be a great deal of investment in infrastructure. For example, the UiS Business School invested relatively large amounts in March 2017 in server technologies that satisfy governmental requirements for the storage of sensitive data.

22.1.4 Research environment

There are 13 research groups at faculty level. The main goals for research include strengthening interdisciplinary research and the formation of research groups and RAPs.

Targets include: strengthening and motivating researcher mobility, including PhD candidates, actively supporting (joint) scientific writing, allocating research time based on results, strengthening Research Area Programmes, increasing capacity for research and project management, cooperating with highly-ranked universities and researchers (adjunct professorships), identifying young researchers and

supporting their career development. International research collaboration and mobility is a prioritised strategic goal.

22.1.5 Research personnel

The plan is to recruit three new staff members in permanent positions each year from 2017 to 2019, a total of nine. Due to increased student numbers, an even higher recruitment level might be necessary. The goal is to increase the number of academic staff in top positions, namely professors and associate professors, and to increase the ratio of women in top academic positions.

The level of recruitment of PhD students and postdocs within the Economic-Administrative research area has increased during the past three years and seems appropriate (15 PhDs and five postdocs during this time period, bringing the current total to more than 30).

Concrete steps are being taken to achieve 15-20% women in senior positions at the university by 2020, including running an RCN 'Women towards the top' project, aimed to support career paths.

Mobility is encouraged and facilitated all the way through undergraduate and graduate programmes. A favourable distribution of time is indicated, with 40% of academics' time generally being allocated to research.

Back in 2011, UiS signed the Declaration of Commitment to the Recommendation of the European Commission on the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers. The action plan for implementation was submitted for approval in autumn 2016, and UiS expects to meet these goals and be awarded the 'HR Excellence in Research' brand quite soon.

22.1.6 Research production and scientific quality

The main goals for research include strengthening interdisciplinary research and the formation of research groups and RAPs.

All of the ten presented papers are published in leading journals in their relevant fields. The faculty is deliberately using external international quality measures to benchmark the quality of its journal papers (e.g. ABS and ABDC). These publications provide a very good indication that the quality of research being undertaken is world-class in academic terms.

Greater alignment is being pursued between the 13 RAPs, research centres and networks and the core academic disciplines.

The university has recently implemented a well-designed framework to support improvements in research quality. It has three components: (i) motivations/incentives: including financial incentives for publication, targeted coaching and mentoring, additional funding support for PhD students, and career development schemes; (ii) abilities: formal mentoring programme for new staff and greater emphasis on PhD training; (iii) possibilities: initiatives to improve research culture and the quality of the research environment, such as continuing the focus on RAPs, protection of research time, seminars and events.

Assessment of scientific quality: 3 - good

22.1.7 Interplay between research and education

All the study programmes are multidisciplinary, and include courses from all areas of research conducted by the staff. The courses offered and the research conducted by faculty researchers are very closely linked.

The strategic plan is currently being revised to reflect the new organisational structure, with special consideration given to a number of challenges relating to improving the interplay between research and teaching. The fact that these are being mapped out, is a good basis for making further improvements.

22.1.8 Societal relevance and impact

UiS aims to increase dissemination to all internal and external constituents.

The strategy for the upcoming period 2017-2020 is to improve user-involvement, create arenas for cooperation between students, faculties and external constituents, further develop entrepreneurial activities and motivate researchers to participate in regional renewal and innovation. This will be pursued in part through closer connections to a larger body of regional, national and international strategic partners both within and outside the academic world.

UiS submitted an impact case: Participation and shared decision-making to improve quality of care in health services. The case is based on research on participation, user involvement and shared decision-making, which have contributed to changes in national health service policy and practice, and to improving patient satisfaction. This research builds on the work of Professor Aslaug Mikkelsen on individual and organisational learning and participatory organisational interventions to improve health and wellbeing in working life. The aim of Professor Marianne Storm's project was to improve patient experience and quality of care for mental health patients by a leadership-supported participatory organisational intervention. Patients and leaders worked together in workshops to find ways to increase user involvement while in hospital care.

Participation, user-involvement and shared decision-making are now considered best practice in health care. A common notion is that the well-educated and well-informed public want to choose their own treatments and providers and want to ask questions about the quality of their health services. An evaluation of the policy implication of the research is shown by Professor Marianne Storm being awarded a Commonwealth Fund Harkness Fellowship in Health Care Policy and Practice for 2017/2018.

This is an outstanding and well-documented case.

22.1.9 Overall assessment

Although steps are being taken to increase levels of dissemination and knowledge exchange, the level of evidence presented is not as strong as could be expected given the level of external funding for projects. The bibliometrics also suggest a lower than expected level of this kind of impact. Some positive moves are being made to improve the situation, including an explicit reward system to encourage engagement with non-academic audiences. The faculty maintains a record of all dissemination and can be allocated extra posts based on good performance. An annual UiS prize is awarded for dissemination.

Even so, more can be done to improve these elements. The list of the most important dissemination and knowledge exchange channels mainly includes traditional media (text books and books), with a couple of media contributions. No indication is given of how these have had impact or the nature of any impact. There is little clarity on how research connects with policy and practice and effects change. There is no sense of social media being used to achieve impact.

The faculty has reflected on the barriers to focusing on such dissemination (which include current incentives for academic promotion being based on academic excellence), so there is a perceived opportunity cost in spending time on other audiences. The University of Stavanger is responding to these challenges through innovations to support networking and other changes to the research

environment that will help academics achieve such dissemination. For example, through building a stronger network of national and international partners, and creating more opportunities for engagement with different kinds of stakeholders. It will be interesting to see how this evolves.

22.1.10 Feedback

Some areas, such as marketing, are well developed and researched, while others, such as hospitality and tourism, lack a clear international research focus.

Scientific quality, especially in relation to academic publishing quality and also attracting external actors, is very strong. There is good capacity for research and a clear programme is in place to continue to improve quality. Weaknesses also need to be addressed in relation to the internationalisation of the staff and research and non-academic impact.

22.2 Research group: Centre for Innovation Research

Based on a large donation, the University of Stavanger (UiS) and the International Research Institute of Stavanger (IRIS) jointly established the Centre for Innovation Research (CIR) in 2008. The research group has more than 30 affiliated researchers, and it works on a wide range of issues related to innovation.

22.2.1 Organisation, leadership and strategies

CIR has a board comprising members from UiS and IRIS, and external members from the private sector and academia. The head of CIR reports directly to the board. The researchers' formal positions are either in departments at UiS or in the Social Science Department at IRIS.

The main objective of CIR is '...to achieve a research excellence status. This implies that the research group needs to be internationally competitive in research on innovation processes, and be one of the leading institutions in selected research areas related to innovation processes. Of course, it also implies that the research group publishes research in leading international scientific journals.' This is an ambitious goal as it should be for a group of this size. The work at CIR covers a wide range of topics ranging from innovation processes in firms/industries/regions, university-firm interaction, entrepreneurship to productivity. The goals and research topics of CIR fit well with UiS's strategy, which aims to further integrate innovation and entrepreneurship into the study programmes and increase researched-based innovation and value creation.

The group currently employs eight PhD students, most of whom are financed through external funds. CIR prioritises doctoral training, and it participates in and contributes to the Norwegian Research School in Innovation. Many of the PhD students spend a period at a university abroad. This exposes them to a different research environment and helps them build an international network.

CIR's external funds come from a number of different projects, reducing its dependency on a few, large projects. However, around half of the external funds come from the RCN, making the group vulnerable to cutbacks in RCN funding. The group is coordinating an EU-funded programme that aims to train young researchers to contribute to innovation in regional business and industry.

UiS supports CIR with IT services.

22.2.2 Research personnel

The research at CIR is interdisciplinary in nature, and the members have backgrounds in economic geography, economics and management.

CIR succeeds in hiring PhD students internationally. In terms of training, CIR collaborates with other Norwegian universities within the Norwegian Research School in Innovation. CIR also organises several internal PhD courses.

Postdocs are also recruited internationally, and the CVs show that most members of CIR either have a PhD degree from another university in Norway or from abroad.

CIR has a seminar series where members of the group can present their work and get feedback.

The gender composition of the group is skewed, but the proportion of female researchers is similar to the national average for the panel.

22.2.3 Research production and scientific quality

Overall, the members of CIR are productive and publish regularly in international, peer-reviewed field journals and books. The quality of journals in which the submitted papers are published varies somewhat. Less than half of the publications are level 2 in the year of publication. A similar picture is found when looking at the publications listed in the CVs. Furthermore, few papers are published in the very best journals in the fields of economic geography, economics and management.

There is no doubt that members of the group have made important contributions to innovation studies on topics such as regional innovation systems, regional skill-relatedness, the use of register data, and the development of new survey indicators. However, it is hard to infer from the self-assessment, which seems to include the life-time contributions of the current CIR members, what the group considers its most important results since its foundation in 2008.

CIR's ambition is to be an internationally leading research group in innovation studies. However, in order to achieve this status, CIR needs to focus more on publishing in the best journals in the relevant fields.

22.2.4 Networking

CIR has a strong national and international network. This is witnessed by co-authorships with researchers at other universities in Norway and abroad. CIR also has extensive collaboration with universities around the world and with a variety of institutions outside of academia, such as local county councils, ministries, UN FAO, the World Bank, and the OECD.

22.2.5 Interplay between research and education

The members of CIR contribute to a number of different courses at all levels (bachelor's to PhD) and have developed a specialisation in innovation studies in a master's programme at UiS.

22.2.6 Societal relevance and impact

CIR collaborates extensively with partners outside academia. These activities serve to disseminate knowledge and benefit society by informing decision-makers. CIR also convincingly demonstrates that it has (i) initiated and been actively involved in reforming policy for the Norwegian seafood industry, and (ii) developed a skill-relatedness index that several counties have used as input to their regional R&D plans.

22.2.7 Overall assessment

This is a large, quite productive and internationally-oriented research group. The members publish regularly in international, peer-reviewed journals and books, although they are more rarely published

in the best journals. CIR has significant impact beyond academia through its extensive collaboration with its partners in industry and government.

Assessment of research group: 4 - very good

22.2.8 Feedback

While CIR is doing well in terms of publication, it needs to focus more on publishing in top journals if it is to achieve its goal of becoming an internationally leading group in the area of innovation. It may also be advisable to try to diversify its sources of external funding to a greater extent.

22.3 Research Group: Finance

The Finance group comprises full-time or part-time employees at UiS as well as others employed outside UiS who are interested in the area of finance from both a teaching and research point of view. It is not clear when the group was formed and its internal status at UiS, i.e. whether the group is prioritised by the university.

22.3.1 Organisation, leadership and strategies

It is stated that the researchers have selected a few specific sub-areas within finance, in which the group members can make significant research contributions. While focusing on a few sub-areas is probably a strong research strategy, no information is provided about the organisation and leadership of the group. On the business school's website, the Finance group is not shown as one of the school's important or prioritised research areas. This fits well with the group's lack of organisation.

22.3.2 Research personnel

Here the group refers to and builds on the practice at the business school with respect to personnel policy. There is no special strategy for or efforts made by the group itself or the group members. It is stated that the group normally has a couple of affiliated PhD students. There is currently one PhD student. There are no comments about or description of the PhD training.

22.3.3 Research production and scientific quality

The group has five focus areas of which two research areas (microstructure of financial markets and energy finance) stand out as areas with a higher level of publishing. There are six internal and full-time members of the group, which naturally make it difficult to be at the international forefront of all five research areas.

The members of the group publish occasionally in the very top field journals and more regularly in level 2 BFI journals. However, overall the productivity does not seem to be very high, at just over one publication per year.

22.3.4 Networking

The researchers in the microstructure research area mainly have an extended, stable, international research network and are e.g. involved in arranging annual scientific conferences.

22.3.5 Interplay between research and education

While it is stated that the group members teach a course in finance at UiS, the self-assessment contains no information about the extent of the teaching activities and the interplay between research and teaching.

22.3.6 Societal relevance and impact

The group members regularly serve as experts to the Norwegian Government and they are involved in collaborative research with various stakeholders from the industry and regulatory agencies.

An interesting impact case submitted shows that, overall, the group is carrying out research that has societal relevance. One of the group members was involved in expert work that led to changes in the way the government pension fund reports its risk-adjusted returns; a very clear and direct impact of research.

22.3.7 Overall assessment

It seems that the research group is mainly a range of individual researchers rather than being a group with common strategies and goals, e.g. there is no formal leadership of the group. The group does not work systematically on recruitment and funding activities. Some of the members produce research of international quality and of very high relevance, and the group thus has unused potential.

Assessment of research group: 3 - good

22.3.8 Feedback

The next step for the group would be to implement common activities, such as research group meetings and presentations, common research projects etc. and to develop a strategy for the research group including e.g. funding, publishing and recruitment.

22.4 Research Group: Hospitality

The Faculty of Social Sciences is one of three faculties at the University of Stavanger and has five departments, one of which is the Norwegian School of Hotel Management. This school covers hospitality management and tourism management.

The Hospitality research group was formally established within UiS in 2009, from a more informal group that had cooperated on an ad-hoc basis since 2000, in particular in connection with the establishment of a scientific journal, PhD supervision, international research relations, research grant applications and smaller research projects. The group has UiS, national and international members and publishes internationally. The group is now being reorganised to be able to compete more effectively and efficiently for UiS-external research funding, and task groups have been formed to develop viable research areas. Task groups include food and food consumption, marketing and service innovation, employee well-being, organisational psychology and general management.

At the Norwegian School of Hotel Management, there is a kitchen laboratory and a restaurant laboratory, a wine laboratory and a cook book museum. The department also runs its own vineyard on campus for both teaching and research purposes. In 2018, the university's new campus hotel will be finished, and this will also include research facilities related to hospitality and restaurant management.

22.4.1 Organisation, leadership and strategies

An initial impetus was the creation of a new scientific journal (together with the Tourism Management research group in Stavanger), which was one of several factors that triggered the formalisation of the research group. Overall, there is a sense that the group is in a period of flux as it strives to improve its profile. As such, the extent to which elements of the strategy have been implemented or are still work in progress is not always clear. The document lacks finesse in terms of how the strategy is explicated and the detail provided in some sections is thin.

We do not get a clear picture of what shape or form the group might take in the future or how it has developed since it was established. Only a limited discussion of the governing structure is provided, focusing mainly on primary leadership of the group and the four task groups around which research is being developed. The groups are somewhat broad, embracing a range of fields linked to different sub-disciplines of management.

A primary focus is on increasing research funding, a necessary step in improving the visibility and international standing of the group. Relatively few details are provided about how this is to be achieved, except that it is hoped that a reorganisation will enable it to achieve this more effectively.

There is some evidence of an increase in general and specific development activities to support publication. The involvement of international partners and visiting academics in this programme is a positive feature.

The PhD programme is core to the development of the research group. Some creative approaches are being pursued to improve students' experience of the PhD programme, through activities to develop cohorts that can benefit from shared learning. However, the extent to which this has become common practice is unclear and our impression is that the scale of the programme is very small.

A positive feature of the group's activity is its involvement in the launch of the Scandinavian Journal of Hospitality and Tourism in 2000. Members of the group have benefited in developmental terms from the opportunities this has provided to gain editing, writing and reviewing experience.

The group aligns its research with UiS strategy to ensure its research impacts on the higher education outcomes of the institution. Evidence is provided of how the research group is linked, through its teaching, to the hospitality industry, presumably supporting opportunities for innovative research.

As is often appropriate for relatively small groups, the university provides central support in relation to securing funding, access to expertise to support the pursuit of external funding and administrative support for funded projects. The narrative suggests, however, that the university's bureaucratic accounting procedures can be a barrier.

Brief mention is made of plans to develop an experimental research laboratory, which is now up and running.

In general, the discussion of strategy is overly generic, with few specific details illustrating how this is being implemented in practice. UiS seems to attract external funding from private sources and from EU projects, and is increasing its international research in collaboration with EU and ECIU partners. However, how much of this goes to Hospitality Management is unclear.

22.4.2 Research personnel

Most of this section deals with explaining how hospitality is distinct from tourism – focusing on arguments with a micro-level focus. Given the relatively small size of the group, it seems more like a collection of individuals conducting their own research, rather than the development of critical mass around topics. This may make the pursuit of research funding more challenging.

At the Norwegian School of Hotel Management, the plan for the recruitment of permanent staff is one new employee annually for three years. However, in contrast to the UiS Business School, two employees will also probably be leaving due to reaching the retirement age, so the net increase is thus limited to one employee.

Only scant details are provided concerning PhD recruitment and training arrangements. Some credible details are provided about the approach to the recruitment and nurturing of early career academics who have recently completed their PhDs. The potential promotion of two staff members to full professorships could help support the group in the longer term, though sustainability is a cause for concern.

22.4.3 Research production and scientific quality

The research staff working in the Economic-Administrative domain is the single largest group of employees within the Faculty of Social Sciences. These researchers are located at the UiS Business School and the Norwegian School of Hotel Management, and, as such, focus on both the more mainstream areas of Economic-Administrative research and the more sector-oriented areas of hospitality and tourism. Researchers at both the Business School and the School of Hotel Management study general management and leadership. The groups focusing on hospitality and tourism are located at the School of Hotel Management.

Hospitality research analyses how guests are perceived, welcomed, received, attended to, bid farewell to and re-invited. Different forms and customs of hospitality have roots in all cultures. There are a host of research topics, national and international, that could be based on this description, and that are not illustrated in the self-assessment.

According to the self-assessment, the research is typically sector-oriented, and its major contributions have therefore been related to the management of hotels, event management and tourism yield. However, there is no evidence of research or projects in this field in the self-assessment.

The Faculty of Social Sciences is a multidisciplinary faculty and spans a number of fields such as tourism and hospitality, journalism, political sciences, sociology, societal safety, law, business administration, accounting & auditing, social work and child care.

Although the faculty and research are said to be interdisciplinary, it is not apparent what the publication results are for hotel management, even in combination with other disciplines.

UiS seems to attract external funding from private sources and from EU projects, and is increasing its international research in collaboration with EU and ECIU partners. However, how much of this goes to Hospitality Management is unclear. There are no articles about hospitality in the list.

22.4.4 Networking

Some networking with other Norwegian universities and more widely has taken place in the past ten years, though the breadth and depth of this networking is difficult to gauge. The group's membership of the Hotel Schools consortium provides good industry connections internationally. It is not entirely clear how these collaborations support research or benefit from research in practice.

We would have liked further specific details of the group's involvement in wider academic reviewing and editing activities, beyond the rather generic statements provided.

Although the faculty and research are said to be interdisciplinary, the self-assessment provides no information about interdisciplinary collaboration in hotel management.

22.4.5 Interplay between research and education

Contributions are made by research group members at all undergraduate and PG levels, totalling some 2,000 hours.

All the study programmes are multidisciplinary, students in hotel management could be expected to share quite a few courses with students in other departments in the faculty. It is unclear how much is specific.

22.4.6 Societal relevance and impact

The self-assessment does not document how much of the research in hotel management is disseminated.

22.4.7 Overall assessment and feedback

The self-assessment provides too little information about the Hotel Management research group for the panel to give a thorough review.

The school is investing in infrastructure, but the strategy is not clear. The view on hospitality research seems rather elementary, and even unclear.

For this discipline, there is surprisingly little funding from the EU or other external sources, which confirms the impression that the research group is not very international. Merging with tourism might be a good solution for both research groups.

Assessment of research group: 2 – fair

22.5 Research Group: Tourism Management

The Faculty of Social Sciences is one of three faculties at the University of Stavanger and has five departments, one of which is the Norwegian School of Hotel Management. This school includes Hospitality Management and Tourism Management.

The Tourism Management research group was formally established early in 2009, based on an earlier less formal collaboration, particularly since 2001, with the department staff's establishment, together with the academic publisher Taylor & Francis, of the academic periodical Scandinavian Journal of Hospitality and Tourism. One group member was the journal's first chief editor and another group member is currently one of the journal's two chief editors.

Similar to the Hospitality research group (and working in collaboration with them), the initial impetus was the creation of a new scientific journal. Staff have benefited from their involvement with the journal, which appears to have been helpful in developing some of the networks that have subsequently helped to generate research funding.

22.5.1 Organisation, leadership and strategies

The self-assessment is for the whole faculty, and there is little information about Tourism Management.

This relatively small group appears to rely heavily on its networking to bring academics together from across the institution, disciplines and outside to cooperate on projects of mutual interest. As such, it is less formally organised than might be the case for a research group comprising a larger number of permanent staff. Although the size and resources of the group raise some concerns about sustainability, the fact that this loose structure has been reasonably productive over the past eight years is a positive sign. However, a well-crafted strategy and careful planning will be needed to support future growth. As well as exploring options for growth, securing funding and cementing academic quality, it would be helpful if such a strategy also considered the wider impact of the group's work on policy and practice.

The role that the research group plays in building knowledge to support the institution's programmes at undergraduate, master's and PhD levels is central to the explanation of strategy. Collaborations with non-academic partners is also mentioned, although the role that these partnerships play in the group's funding plans is not clearly explained. Other links to the host institution's strategy are not mentioned.

There is no clear picture of the likely shape of the group in the future. A greater focus in the narrative on this trajectory would have been welcome. More information is needed about the leadership and governance arrangements for the group, which are only briefly mentioned.

The university provides central financial support to ensure group members can make trips, gather data and take part in research activities. The host institution also allocates time in researchers' work plans to enable them to develop externally funded projects. This investment is hoped to produce between 3.5 and 4.5 full-time equivalents. This is a relatively small number, raising issues about the sustainability of the group. It is clear that attracting external funds is vital to the group's ongoing success. Given the comments on the relative lack of funding for tourism research, this is a concern. Library and IT support is also provided, but operational support for the administration of projects is more limited.

22.5.2 Research personnel

The very small numbers of PhD students is clearly problematic, although it sounds as if plans are in place to improve the situation in the future, including through the inclusion of PhD funding as part of bids for funding. No details are provided about staff recruitment or development, although the indications are that this group has been established around quite an informal grouping of professors, many of whom have associate status.

22.5.3 Research production and scientific quality

The research on tourism management at the University of Stavanger has three main fields of focus: traveller experiences, marketing and sustainable destination development. Two members have served as resource editors in *Annals of Tourism Research* (Elsevier), which has been among the top three to four tier journals in this field of research. Several of the group's publications have been frequently downloaded and widely cited.

The main emphasis here is to describe the academic contributions of the group's work, which clearly focus on publishing in highly-rated academic journals across a number of topics of interest. Clear methodological and theoretical contributions to debates on these topics are evidenced. While there are also indications of the empirical value of the group's work, there is little discussion of quality in relation to the impact of its research on policy or practice.

The sample articles, although high in quality and published in highly-ranked journals, do not reflect an international outlook, as the authors are Norwegian or Nordic.

The self-assessment mentions one project on tourism, funded by the RCN: Tourism elasticities. More international research projects could have been expected.

Although the faculty and research are said to be interdisciplinary, the research on Tourism Management does not clearly demonstrate this dimension.

22.5.4 Networking

The research on Tourism Management shows collaborations with other institutions in the country and in the Nordic area, but does not illustrate any international projects or research. More international research projects could have been expected.

Productive and well-established collaborations with Norwegian academics at other institutions have been at the heart of the group's research. Such collaborations are an effective means of increasing capacity and combining resources so that stronger bids can be developed. They have also helped to support co-publication. These partnerships also play a useful role in ensuring research focuses on thematic areas that match the capabilities of researchers in the group. Although international partnerships seem to be at an earlier stage of development, there is evidence that they are also starting to be productive. The description focuses on academic collaborations, rather than commenting on those with public or private sector partners.

The group members also collaborate with the tourism sector, on its aspirations for more economically, socially and environmentally viable tourism. The group's members have collaborated nationally since 2007 with academic staff at several universities in Norway, primarily based on research applications related to the NCE Tourism Fjord Norway network, including the University of Bergen, Norwegian School of Management (BI), Western Norway Research Institute and the Institute of Transport Economics. More EU projects showing international networking could have been expected.

22.5.5 Interplay between research and education

All the study programmes are multidisciplinary, students in tourism management could be expected to share quite a few courses with students in other departments in the faculty. The programme is a building block for a knowledge-based platform serving the university's bachelor's, master's and PhD programmes in tourism management, thus contributing to the university's strategic goals.

The figures suggest that the group's members are involved in making contributions to the institution's teaching at undergraduate, master's and PhD and PG levels, totalling some 1,600 hours.

22.5.6 Societal relevance and impact

The project has a regional impact; the publications, although written with national colleagues, have an international audience.

22.5.7 Overall assessment and feedback

The self-assessment provides too little information about the Tourism Management research group for the panel to give a thorough review. Although the group aims to publish in highly-ranked academic journals, its position is rather weak. Staff and impact are Norwegian or Nordic, not very international, and its strategy is not clear.

Merging with Hospitality Management might be a good idea.

Assessment of research group: 3 - good

23 Overall Assessment of the Economic-Administrative Research Area

The research landscape of the Economic-Administrative research area is dominated by a few large universities and several small institutions with a clear mission and agenda to create outstanding performances in terms of research quality and quantity. Numerous research groups have managed to raise their research quality to an international standard. A clear strength in the area, as shown by the impact cases, is the many connections and various forms of cooperation with the private and public sectors.

The following text is mainly about the shortcomings and what could be improved in order to generally raise the research quality of the Economic-Administrative research area in Norway.

23.1 Profile, strengths and weaknesses

23.1.1 Following up earlier evaluations

While Economic research in Norway was evaluated in 2007, the Economic-Administrative research area has not previously been assessed separately by the Research Council of Norway (RCN). This does not mean that all the institutions in the Economic-Administrative panel have not been evaluated before. In fact, several institutions were included in the previous evaluation, which included some of the institutions that are currently being studied in the Economic-Administrative area.

Furthermore, the recent mergers of several Norwegian institutions mean that the recommendations from the previous assessment do not apply in some cases as the institution no longer exists. For other institutions, evaluations have previously been conducted by external organisations other than the RCN. For example, in the case of HiOA, the recent external review of research groups considered the efficiency of implemented policies in relation to the research environment. Furthermore, NHH's PhD programme has been evaluated in 2011 and 2016, while the Norwegian Agency for Quality Assurance in Education (NOKUT) reviewed the PhD programme at Nord University in 2000. The impact of the merger between IRIS and Agder Research in 2016 was also studied and provided positive feedback. With these reservations, the previous evaluations resulted in several recommendations that can broadly be grouped into the topics below.

One of the main recommendations from similar panel evaluations of Geography, Economics (in some cases, although the average performance was at a good or very good level), Political Science was to further increase publication quality and quantity. Research productivity and research output quality impacts the overall qualification of the faculty and ultimately depends on the qualifications of the staff. The qualifications are, among other things, based on sound recruitment practice and policy, and on restructuring faculty and research groups. Developing and further strengthening PhD programmes could have the potential to make the institutions more attractive, but at the same time also supports their sustainability in the long term.

Other recommendations include attracting more external funding and strengthening cooperation and networking with other national and foreign institutions to further ensure the sustainable operation and international success of the evaluated colleges and universities.

In most cases, previous RCN recommendations were found to have helped the institutions to overcome some weaknesses in one or more of the above-mentioned areas, thereby supporting their optimal and long-term operation and development.

On the other hand, there has been no follow-up of some of the institutions because they have subsequently undergone fundamental structural changes or did not exist at the time of the previous evaluation. Other institutions were simply not included in the previous evaluation. However, it is important to reiterate, that the recommendations made in 2007 did not target the Economic-Administrative research area.

23.1.2 Across the institutions in Economic-Administrative research

The following areas of interest have been assessed across the institutions: (i) Organisation, leadership and strategies, (ii) External funding and (iii) Research environment.

Organisation, leadership and strategies

The institutions have different options and opportunities, reflecting their very diverse settings, resources and focus. Hence, they need to find their niches in the Norwegian and international research arena and to develop strategies and management/leadership structures that reflect this positioning. Although some institutions have been able to achieve this outcome, many simply state that their goal is to achieve very high research quality and increase international external funding. They often lack a realistic time frame and reflections on their current position. These institutions need to analyse where they are today and develop strategies that better reflect their current situation and available resources: 'They should practice what they preach'. The institutions could also benefit from defining their mission: what difference do they want to make and what value will they add to Norwegian society?

The self-assessments often lacked information about the inclusion of an action plan in the implementation of the strategy. Many institutions referred to research strategies that were formulated and decided some years ago, but provided no information about the implementation or outcomes of those strategies.

The research groups, and consequently the research areas, have often been developed from a bottom-up approach, resulting in a poor match between institution strategies and the developed research areas. Many research groups are driven by the motivation and interests of single researchers. There is often a weak relationship between these research groups' strategies and those of the institutions.

There is often no consideration of and reason provided for the chosen leadership and management structure, and its suitability to implement the strategy is hence unclear. Several leadership structures are described, e.g. governance versus business structure. Many, if not all, of the institutions have a dean for research or even a vice-rector, although their mandates vary. However, at department level, it is often unclear whether there is a defined research leadership position or whether this is part of the head of department's general management tasks. In the latter case, the research leadership can lack visibility and hence vanish or be diluted.

We believe that an advisory board that includes external experts could provide useful recommendations and research strategy oversight for many of the institutions.

External funding

The main external source of funding, and in several cases also the only source, is the RCN. The overall level of external funding is, in some cases, relatively low. It is naturally an advantage that considerable

domestic public funding is available, but it also makes the institutions and research groups very vulnerable to changes in the RCN's funding policy. Some research groups have been developed based on RCN funding and therefore often depend on external funding for future development. Moreover, this may also result in Norwegian researchers' capability to compete successfully for external funding not being fully developed and employed. Strategies need to be developed that include other sources of funding, e.g. EU funding. A few research groups have developed closer cooperation with the private sector and industry as a means of funding academic positions and projects.

The recent ready availability of domestic research funding means that many institutions appear not to have fully developed the necessary administrative resources and capabilities to bid for international grants. To ensure the long-term sustainability of research, resources should be devoted to diversifying income streams and putting the necessary support in place. It could be useful to establish such resources at a national level, for example, to provide ready access to funding opportunities, to offer application support and to create a setting for bringing researchers together from different institutions to collaborate on projects. Institutions also need to develop their own resources to support and enable researchers to identify and produce good quality research project bids. Good staff training is essential to becoming more competitive. Setting up such research support units is an important leadership task.

International funding, including EU funding, also requires the development of international research cooperation, which is an essential precondition for achieving good research quality in the long run.

Research environment

In general, the research infrastructure, including access to library facilities and databases, and the availability of travel and conference grants, including options for sabbaticals and equipment, is very good, with the exception of very few cases. While the physical research environment is in place in nearly all of the institutions, other aspects of the research environment, including formalised research groups to organise research activities such as internal and external seminars, meetings, development of external funding strategies, are lacking in many research groups. There is untapped research potential in such cases because the research environment is not fully developed.

23.1.3 Research personnel

International standards with respect to the structure of academic positions – i.e. PhD, postdoc/assistant professor, associate professor (tenure) and professor – are not implemented consistently throughout the sector. The practice varies from the award of tenure directly to those with a PhD (no period as a postdoc/assistant professor) to the international standard where tenure is at the associate professor level.

Recruitment

Most institutions recruit internationally, but they may have a passive approach to this. Typically, the process involves formulating the job vacancy, posting an advertisement on the website and then circulating the job vacancy through the institution's own network. Only a very few institutions, e.g. BI and NHH, have a more proactive recruitment policy involving search committees, job market advertisement and presence, direct targeting of individuals etc.

Recruitment can be more difficult in Norway than in central Europe. The location, particularly for institutions in the north, means a more creative approach to recruitment is required than for competitors in the rest of Europe. Language issues may limit the extent to which institutions are able to hire internationally in cases where teaching and administration is in Norwegian. These issues often induce the institutions to consider to what extent they recruit from outside and how much of the

training of future academic staff they do themselves. The answers to these questions will, in the future, be determined by the nature of the job market. However, even if international recruitment is limited, it still plays an important role in ensuring an inflow of talent, new ideas and best practices.

A passive recruitment policy can lead to 'fishing around' in the job market without considering what the institution really needs. As a consequence, researchers are recruited who happen to see the job vacancy or who are available exactly at that time. Institutions could develop a recruitment policy that is linked to their strategy, which includes procedures to more proactively secure strong senior researchers.

Training

There is some provision of formal training for PhD students, but many, if not most, institutions develop their students by sending them to stay at foreign universities.

The PhD programmes are small, except in a few cases, with only a few students enrolled in somewhat narrow fields of application. Many of the minor institutions have PhD programmes in the same research area (e.g. innovation and entrepreneurship) suggesting there is scope for intensified cooperation between institutions and across PhD programmes to develop a range of high-level and common courses. An example of such an initiative is the Norwegian Research School in Innovation in which ten universities participate. Such collaboration could help create a more vibrant and active research environment for PhD students across institutions.

This line of thinking could be continued to develop nationwide PhD programmes by merging different institutional programmes. As part of such a nationwide system, it would be important to decide how many PhD students to educate per year and to consider an appropriate distribution between the participating institutions.

Only a few institutions have developed a career development programme and training courses for younger researchers. This is out of line with the practice in many other countries. At some institutions, the international career ladder is followed, while at others tenure is only available to those with a PhD. In the latter case, younger researchers are often allocated less research time than more experienced researchers. Such an approach is not in accordance with an often applied international standard, where younger researchers are often allocated more research time than e.g. associate professors. These framework conditions are important considerations when career development and training policy is devised. A career development programme should also be seen as an important part of the recruitment policy.

Gender balance and diversity

Gender is one element of the diversity of staff. While most institutions/research groups provided information about gender balance, less information was given about other types of diversity. On average, 1/3 of the researchers employed are female. The figures show that gender balance issues apply generally to the sector, with fewer females following an academic career than males. Gender balance is less of a problem at junior levels, but increases in more senior positions. Some institutions have specific support in place for female staff seeking promotion to more senior roles. However, it is also important that the gender issue is addressed at PhD level to effectively tackle such subsequent problems.

Nearly all of the institutions are aware of the gender challenge, relatively few, however, have formulated gender policies and only a few of those that have such a policy, have developed an action

plan, i.e. the gender policies are not implemented. An implementation issue could be that the gender policy is often formulated at the institutional level, requiring extra implementation effort at the department and research group levels.

There is a programme in the RCN on Gender Balance in Senior Positions and Research Management (BALANSE), which provides special funding to support women and their carrier development. Such schemes can be utilised more to communicate to institutions that is important to address gender issues.

Mobility

The established universities have formal schemes in place for sabbatical semesters with varying incentives. However, while other institutions support mobility, it is totally up to the individual researchers to apply and some may have to make their own arrangements for teaching cover.

A common feature is that it is solely up to the individual researchers themselves to decide where and when to take the sabbatical. There is potential for research groups to utilise sabbatical arrangements more strategically as an instrument to build international networks. Although this can occur as a by-product of current arrangements, it is not a guaranteed outcome.

The incoming mobility of scholars and researchers is less developed. Several institutions have professor II positions (20%); but they are often filled by Norwegian professors from other institutions. An incoming mobility scholar scheme can be used to establish international networks.

23.1.4 Research production and scientific quality

The evaluated institutions are very diverse in terms of their settings, resources and research focus. The institutions range from mature universities to university colleges and research institutes that focus on an area of applied research. A consequence is that there are different baseline conditions, from universities financed by basic government funding supplemented by project funding from the RCN to nearly 100% external research funding.

Overall, there are few research groups that have achieved a very high international standard. Some research institutes meet international standards within their field of expertise.

Productivity ranges from 1 publication point per person per year to 3.35, with an average for Economic-Administrative research of 2.26. This figure is lower than the average for Social Science in Norway (2.84), which indicates that there is room for improvement. Although some of the institutions have lower productivity and research quality in relation to international norms, the quality of research of some institutions and research groups is excellent. In these cases, there is evidence of publishing in the very highest quality journals. Institutions need to seek an appropriate balance between publishing productivity and publishing in the very best international journals. Although achieving the highest level of publication can be costly timewise, the benefits to visibility and branding of the institution can be considerable. In other words, quality is important, because publication in top journals is crucial for international recognition.

The research is quite often very interdisciplinary in its approach. There were also many examples of applied research in specific fields such as transport safety, shipping and logistics, energy and sustainable tourism. In some cases, the research institutions specialise in practice-based and applied research, relying heavily on external funding and networks. These interdisciplinary approaches tend to open up more diverse external funding opportunities. However, in many cases there is a latent

opportunity to apply for more international funding, such as from the EU, in order to promote the internationalisation of projects and networks.

23.1.5 Research cooperation /networking

International networking and cooperation is mainly driven by the individual researcher and her/his motivation and incentives. This can, at times, develop as an ad hoc and bottom-up approach, which can be fine. However, in many institutions, research cooperation and networking could be developed even further and more systematically. Institutions need a strategy for developing external networks in collaboration with research groups and universities within and beyond the Nordic region. This strategy could guide international collaboration in relation to funding, identify appropriate institutions for research exchanges, enable collaboration on PhD training and support academic and PhD recruitment.

The regional and local profile of much of the research lends itself well to networking with local public organisations and private-sector bodies. There are several excellent examples of strong relationships with non-academic stakeholders leading to productive and socially-relevant research projects with high social impact.

23.1.6 Interplay between research and education

In general, the time split between teaching and research seems in line with what might be expected in the sector. The available time for younger researchers varies. In some institutions, they are allocated more time than the senior staff, while in other institutions the opposite applies. The panel regards the need for uninterrupted research time as particularly important, especially for younger researchers.

In relation to the balance between teaching and research, clear connections and integration between the two are desirable. The connection between research and teaching is particularly important for educational institutions that are transitioning into becoming more research-oriented institutions with research-based teaching. The level of integration varied – in some institutions research was incorporated into the curriculum from the outset. In others, the integration was much shallower. In the former case, institutions were genuinely able to develop new curricula as a result of their research. There were some very good practical examples in which research clearly informed the design and delivery of teaching. For example, there were many instances, especially at master's level, in which research groups have developed specialised courses that build directly on their research expertise. However, in some cases the general expertise of research groups could also easily be used at bachelor's level.

Although the opportunities for students to become involved in research varied, there were many examples of master's students and, in some cases, undergraduate students becoming actively involved in the institution's research. Examples included master's dissertations focusing on areas of research priority for the institution and also cases in which students acted as research assistants in research groups.

23.1.7 Societal relevance and impact

Members of this panel have jointly selected the 'best' impact cases (20%) out of the 72 cases that were submitted by the institutions and research groups. The 14 selected cases in table 2 are considered to be the 'best' based on the real impact generated, the extent of stakeholder engagement and the research quality (research design and methodology).

Table 2 Good practice impact cases

<i>Institutional unit</i>	<i>Name of impact case</i>	<i>Submitted to which research group (if any)</i>
Institute of Transport Economics	Handbook of Road Safety Measures	Traffic Safety*
IRIS International Research Institute of Stavanger	Site specific scenarios	
NHH Norwegian School of Economics	Operations Research Transforms the Scheduling of Chilean Football Leagues and the South American World Cup Qualifiers	Shipping and Logistics*
	Board gender quotas	Corporate Finance*
	ORGCHANGE	Future-Oriented Corporate Solutions, FOCUS*
	Price risk	
	TAX REFORM	Norwegian Center for Taxation*
Nord University Business School	HIGHNORTH	MACE*
Norwegian School of Sport and Science	Youth Olympic Games	Event – organization, management, volunteers
Norwegian University of Science and Technology Faculty of Economics and Management	GassOpt	Computational Economics and Optimization*
University College of Southeast Norway School of Business	Developing Sources of Competitive Advantage in the Norwegian Travel Industry (REISEPOL)	
University of Agder Faculty of Social Sciences	Realizing benefits from government IT investments	
University of Stavanger Faculty of Social Sciences	Risk NBIM	Finance Group at UiS Business School*
	Seafood	Innovation Research

* The impact case was also submitted to the institutional self-assessment

The impact cases in table 2 demonstrate the range of societal relevance of academic research, in terms of number/type of stakeholders, size (both monetary and scale) and by research topic. Most of these projects aimed to support governmental decision-makers, while in other cases the institution or research group worked together with private companies, i.e. ORGCHANGE, where a large international telecommunications company was a central part of the research.

Some of the studies focus on future scenarios to support different sectors when Norway's oil revenues diminish. For example, 'REISEPOL', 'Site specific scenarios' and 'Seafood' address the future importance of the tourism and fishing sectors. Sports-related studies conducted at both the national and international levels, i.e. 'Youth Olympic Games' and 'Operations Research Transforms the

Scheduling of Chilean Football Leagues and the South American World Cup Qualifiers'. 'Price risk' is an example of quality research that led to important changes in the way options are presented. The key here seems to be both the quality and relevance of the research.

Another group of studies addresses the financial sector and public investments, e.g. 'TAX REFORM', 'Realizing benefits from government IT investments' and 'Risk NBIM'. The variety of these impact cases is further broadened by very specific projects, such as the gender-balanced corporate board, spatial optimisation of natural gas pipeline establishment or a handbook on Road Safety Measures and the compendium of effects of road safety measures analysis, e.g. 'Board Gender Quotas', 'GassOpt' and 'Handbook of effects of road safety measures', respectively.

Although most of these studies are site-specific in terms of empirical analysis, they also represent theoretical discussions that can further extend the societal impact of these scientific works to other settings. Another interesting feature is the long-term perspective on collaboration between the involved partners as in 'HIGHNORTH'.

Both quantitative and qualitative methods have been used in these studies, i.e. interviews and focus groups, and econometric and operation research approaches. While in some cases the project has a 'linear structure', with no further interaction between the stakeholders after the completion of the study, most have a 'looped structure', with further cooperation and additional research collaboration after the end of the project.

23.2 Overall feedback

The overall feedback is divided into target three groups: the institutions including the research groups, the RCN and the Norwegian Government.

The institutions

The evaluated institutions are very diverse in terms of their settings, resources and focus, which has a significant impact on their research opportunities. Because of this diversity, it is very important that each institution determines what difference they want to make, within which research areas they will be active and what value they will add to Norwegian society. These goals need to be realistic and attainable within a reasonable time period.

Only a few institutions have formulated consistent strategies to deliver their institutional goals. There is typically a clear organisational structure when it comes to teaching and research, but how this structure assists in implementing the institution's goals was not always clear. Most institutions lack an active recruitment policy and who fills positions is thus relatively random.

The applied framework for organising the research differs greatly and a more unified application of the term research groups (for disciplinary research) and research centres (applied research) may be required, as a means of organising the research. Furthermore, good practices could be defined for the research environment (meetings, seminars, presentations, common applications etc.).

Recommendations with respect to research personnel include: The need for a clear path for progression, consistency in how steps on the career ladder are defined, and a clearer division of research and teaching time. Institutions and research groups need to think about designing career development for the whole spectrum of research (from PhD-> assistant-> senior), taking care not to leave out any steps on the career ladder. There was no consistency across institutions in the titles for job positions, e.g. does postdoc correspond to assistant professor? It is important to clarify the division

of research and teaching time at each level, especially for junior staff, as they should have more time for research than more senior staff in order to establish their research careers. The mobility of researchers is promoted by sabbatical schemes. The use of these schemes is often bottom-up and ad hoc. By aligning individual and organisational incentives, a more strategic use of sabbaticals could support the development of international networks and connections. Incoming visitors to institutions are mainly national. There is potential to seek more international cooperation for incoming staff and exchanges, such as through the European Commission Co-fund mobility programme that supports research exchanges.

Only a few institutions depend heavily on external funding. All of the institutions receive some external funding from the RCN and there is a common perception that other sources of external funding are unnecessary. The RCN funding is, in some cases, substantial. The lack of diversity in funding sources could be financially risky, if government funding declines, impacting on the sustainability of research. Furthermore, it may lead to undeveloped capability to successfully compete for funds compared to other countries. All the institutions state as part of their third-party funding strategy that they want to increase external funding, e.g. by pursuing EU funding. However, to be a serious partner in research project collaborations, institutions must develop a professional research support administration that includes both pre- and post-grant support. The prestige associated with EU funding could be used by institutions to become more visible internationally and to build stronger international networks.

Another element relating to the lack of external funding is the extent to which researchers are incentivised to apply. Developing project proposals can be very time-consuming, so institutions may want to consider offering compensation to researchers bidding for funding, if they want to increase external funding.

The Research Council of Norway

The role of the RCN is to secure the quality of Norwegian research and to promote research that addresses major social challenges. The RCN also promotes national and international collaboration.

The Economic-Academic research area is large (around 950 researchers in more than 20 institutions). The funding structure of the institutions shows that the external funding from the RCN is, in many cases, the only external source of funding. This indicates that the institutions find it more convenient to obtain funding from the RCN than from other sources.

PhD education and PhD funding are central to the development of quality research. In view of the difficulties that some institutions face in building capacity in this area, we recommend exploring the potential to merge PhD schools into a nationwide PhD school.

The RCN could develop benchmarks for good management of research groups and research centres, which could enhance their competitive quality and size at an international level.

The internationalisation of Norwegian research is a core strategy area for the RCN. It needs to promote the country's research outside of Norway, including through the development of relevant international partnerships. The RCN could focus strategically on the longer term, reflecting that cooperation with other foreign institutions can take much longer than the three-year time frame typical of many funding calls. The RCN could initiate a process to identify the areas of business, economic and administrative research of international standard, and to consider the alignment of the areas that Norway seeks to prioritise. The RCN is already involved in collaboration with other research councils, so there is a good basis for supporting international projects and networks on which it can build. The RCN also has

programmes promoting collaboration with institutions from specific countries e.g. the Norway-China collaboration.

The RCN supports research that addresses social challenges formulated as priority areas. As part of the evaluation, institutions were asked to specify their research in these areas. Examples of priority areas are the oceans; climate change, the environment and environment-friendly energy; public sector renewal and higher quality; enabling technologies and an innovative, adaptable private sector. In most cases, research in these areas is interdisciplinary. This creates a dilemma, because it can be more difficult to publish interdisciplinary research in high-quality journals than monodisciplinary research. It is also more difficult to publish research output from applied areas well, e.g. sports, tourism and energy. This dilemma can be addressed by the RCN when it formulates its research policies and funding priorities.

The Ministry of Education and Research

Our recommendations and concerns focus on topics that are relevant to the Ministry. Firstly, there is the overall question of research capacity and distribution of research resources within the country. Does Norway need more than 20 institutions or business schools that have researchers within the Economic-Administrative area? It should be acknowledged, at least, that all of the institutions cannot be highly internationally competitive.

Secondly, there are many PhD schools within the research area in Norway with a small number of students in each school. Many of these PhD schools could cooperate more or merge to offer a common, viable and sustainable set of relevant PhD courses. As it is costly to educate PhD students in Norway, it is important to ensure that the quality of the education is as high as possible.

Thirdly, the lack of external research funding beyond the RCN has to be addressed. Many institutions have not developed the necessary administrative infrastructure and support units to assist researchers in writing research bids at an international level. Many institutions will not be able to set up such units. A resource-efficient way to tackle this could be to establish an institution (at the nationwide or regional level) to provide support for Norwegian researchers applying for EU funding and also with the administration of such complex projects.

Fourthly, both the public and private sector generally depend on input from academia and in particular on knowledge from the Economic-Administrative research area. Therefore, it is necessary for Norwegian research policy to focus on both basic and applied research. Applied research is more often externally funded than basic research. It is, however, more difficult to publish applied research in highly-ranked journals and hence ambitious researchers, research groups and institutions will tend to favour basic research. The bigger institutions and universities receive most government funding and are thus in a much better position to fund basic research. Other institutions have to focus more on applied research, because this provides a more ready source of funding, very often from external sources. Hence, the current model encourages a mix of basic and applied research at the national level. However, it does not support applied and basic research within each institution. If its aim is the latter mix of applied and basic research, then the current financial structure does not support this objective.

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Appendices

Appendix A: Terms of reference

Evaluation of research in the social sciences in Norway 2016 - 2018

Terms of reference

The Research Council of Norway has been charged by the Ministry of Education and Research with the responsibility for performing evaluations of research. The Division for Science has decided to evaluate research activities in the social sciences in Norwegian universities, university colleges and relevant research institutes.

The objective of the evaluation

The objective of the evaluation is to review the overall state-of-the-art of research in the social sciences in Norway, focusing primarily on the situation in universities, university colleges and relevant research institutes. The evaluation will also take into consideration knowledge exchange and the societal impact of the research performed. For the higher education institutions, the interplay of research and education will be assessed. The conclusions of the evaluation will provide greater knowledge about the present state of social science research, and form the basis for recommendations on the future development of research within the various fields of the social sciences in Norway.

For the institutions evaluated, the evaluation is expected to provide insight, advice and recommendations that can be used to enhance their own research standards, taking into account the different roles and purposes for universities, university colleges and research institutes. For the Research Council, the evaluation will help to expand the knowledge base used to develop funding instruments and provide input on research policy to the Norwegian Government.

The evaluation is expected to:

- Review the scientific quality of the research within the social sciences in an international context;
- Provide a critical review of the strengths and weaknesses of the fields of research nationally, at the institutional level and for a number of designated research groups;
- Investigate the relevance and social impact of social sciences research in Norway in general and in particular its potential to address targeted societal challenges as defined in the Norwegian Government's Long-term plan for research and higher education;
- Assess the role of organizational strategies and leadership in promoting the quality of research, education and knowledge exchange;
- Assess the extent to which previous evaluations have been used by the institutions in their strategic planning;
- Investigate the extent of interdisciplinary research at the institutions and in the research groups;
- Identify the research groups that have achieved a high international level in their research;
- Review the role of the Research Council in funding research activities in the social sciences.

Organisation and methods

The evaluation will be carried out by an international evaluation committee consisting of seven panels. Each panel will carry out the evaluation in its field of expertise.

Panel 1	Geography
Panel 2	Economics
Panel 3	Political science
Panel 4	Sociology
Panel 5	Social anthropology
Panel 6	Economic-administrative research
Panel 7	Educational research ³²

The panels will base their evaluations on self-assessments provided by the research institutions and a bibliometric analysis, as well as on interviews and presentations given in meetings with the involved faculties/departments and the social science research institutes. The self-assessments from the institutions will include factual information about the organisation, its resources and strategic plans, national and international research collaboration, dissemination and societal impact of the research, as well as education activities.

For a selected number of *research groups* the institutions will also provide CVs and publication lists for the group's members, a description of the scientific objectives and organisation of the group as well as a digital copy in full text of one scientific article or book chapter for each group member affiliated with a Norwegian research organisation. The Research Council will provide data on its funding of social sciences research and supplementary information on the societal impact of the social sciences in Norway.

The panels are requested to present their findings in written reports. Preliminary reports will be sent to the institutions included in the evaluation in order to check the accuracy of the factual information. The evaluation committee's final reports will be submitted to the Board of the Division for Science for final approval.

The principal evaluation committee will consist of the chairs of each panel.

Tasks of the evaluation panels

The panels are requested to:

- Evaluate research activities with respect to scientific quality and impact.
- Evaluate the societal impact of the evaluated research activities.
- Evaluate how research activities are organised and managed.
- Evaluate the interplay of research and education activities in the higher education institutions and ensure coordination with the evaluation on education quality.
- Give specific recommendations for the future development of research activities.

³² The evaluation of educational research is organized in a separate evaluation process using the same methods and evaluation data as the other panels. Whereas the evaluation of social science research is organized under the Division for Science, the evaluation of educational research is organized under the Division for Society and Health and its result will be reported to that board. At the same time the evaluation of educational research will be considered as a panel under the evaluation of social science research and thus be included in the report of the principal committee to the board of the Division for Science* *This decision was altered during the process, and the evaluation of Norwegian education research was launched as a separate report in March 2018: ISBN 978-82-12-03674-1 (pdf).

Aspects to be addressed in the panel reports:

The following mandatory aspects must be addressed. The panels are free to include other questions/aspects they consider valuable to the evaluation.

1. National level

- Strengths and weaknesses of Norwegian social sciences research in an international context;
- Research cooperation nationally and internationally;
- The scientific and societal impact of the research, including relevance for societal challenges identified in the Norwegian Government's Long-term plan for research and higher education;
- Cooperation with other sectors of society (e.g. private and public sector);
- General resource situation regarding funding and infrastructure;
- Human resources, gender balance and mobility.

2. Institutional level

- Organisation, research leadership and strategy, including follow up of recommendations given in previous evaluations;
- Resource situation, such as funding, staffing, infrastructure and the balance between resources and research activities;
- The scientific quality of research within the disciplines included in each panel;
- Facilitation of scientific quality, e.g. publication strategies, focus areas of research, national and international research collaboration;
- Training, mobility and career paths, e.g. policies for recruitment, mobility, career paths as well as gender and age balance in academic positions;
- Research collaboration and facilitation of collaboration and networking activities at the national and international level;
- Collaboration and contacts beyond academia, including strategies for dissemination of the research, examples of impact and the social relevance of the research;
- The interplay of research and education activities in the higher education institutions, including strategies to enhance it.

3. Research groups

- Organisation, research disciplines and competence of members;
- Research activities, scientific quality and production. The scientific quality of the research groups should be assessed according to a 5-point scale;
- Training, mobility and career path of researchers;
- Research collaboration and networking activities at the national and international level;
- Use of research infrastructure;
- Knowledge exchange and societal impact of the group's research, value added to partners outside of academia;
- If relevant, the groups' contribution to education activities.

Tasks of the principal evaluation committee

The committee is requested to compile a summary report based on the findings, assessments and recommendations of the panels. This report should offer an overall assessment of the state of the research evaluated. The report should also offer a set of overall recommendations concerning the future development of research in the social sciences.

The committee is requested to:

- Summarise the overall scientific quality and relevance of the research in the social sciences in Norway. Identify which research areas have a particularly strong scientific and societal impact in a national and international context, and which are particularly weak.
- Summarise general assessments related to structural issues such as institutional and national strategies, the institutional landscape, research infrastructure, recruitment and mobility.
- Summarise how the research institutions and the Research Council have followed up previous evaluations.
- Provide assessments and recommendations at the institutional level, taking into account the different roles and purposes for the universities, university colleges and research institutes.
- Provide assessments and recommendations at the national level, including the role of the Research Council in funding research activities in the social sciences.

The committee's conclusions should lead to a set of recommendations for the future development of research in the social sciences in Norway, providing advice to the research institutions, the Research Council and the Ministry of Education and Research.

Appendix B: Overview of participating institutions, number of researchers and research groups

<i>Institution</i>	<i>No. of researchers</i>	<i>No. of research groups</i>	<i>Participating in panel*</i>
Bergen University College	20	1	6
BI Norwegian business school	153	3	2 and 6
CICERO Center for International Climate and Environmental Research	27	1	1, 2 and 3
CMI Chr. Michelsen Institute	59	2	2, 3 and 5
Fafo Institute for Labour and Social Research	58	3	3, 4 and 5
Fridtjof Nansen Institute	29	2	3
Frisch Centre	37	2	2
Hedmark University of Applied Sciences	32	-	4 and 6
Institute for Social Research	45	4	2, 3 and 4
IRIS International Research Institute of Stavanger	28	-	3, 4 and 6
Lillehammer University College	52	2	3, 4 and 6
Molde University College	30	2	6
NHH Norwegian School of Economics	287	11	2 and 6
NINA Norwegian Institute for Nature Research	25	-	1, 2 and 4
NIPH Norwegian Institute of Public Health	19	-	3
Nord University, Business school	76	3	4
Nord University, Faculty of Social Sciences	63	3	2 and 6
Nordland Research Institute	31	3	1, 4, 5 and 6
Norwegian Institute for Defence Studies	21	1	3
Norwegian University of Life Sciences, Faculty of Social Science/ Faculty of Landscape and Society	54	4	1, 2, 3 and 5
Norwegian University of Life Sciences, School of Economics and Business	57	4	2 and 6
Norwegian University of Science and Technology, Faculty of Economics and Management	179	2	2 and 6

<i>Institution</i>	<i>No. of researchers</i>	<i>No. of research groups</i>	<i>Participating in panel*</i>
Norwegian University of Science and Technology, Faculty of Social Sciences and Technology Management	129	7	1, 3, 4 and 5
Norwegian University of Sport and Physical Education	21	2	4 and 6
NUPI Norwegian Institute of International Affairs	38	2	2 and 3
Oslo and Akershus University College, Centre for Welfare and Labour Research	172	8	3, 4 and 5
Oslo and Akershus University College, Faculty of Social Sciences	77	3	3, 4 and 6
PRIO Peace Research Institute in Oslo	35	3	1 and 3
TØI Institute of Transport Economics	23	1	4 and 6
Uni Research Rokkan Centre	28	4	2, 3 and 4
University College of Southeast Norway	48	3	4 and 6
University of Agder, Faculty of Social Sciences	93	5	1, 3, 4 and 6
University of Agder, School of Business and Law	62	-	2 and 6
University of Bergen	215	12	1, 2, 3, 4 and 5
University of Oslo, Centre for Development and the Environment	21	3	1, 3 and 5
University of Oslo, Faculty of Law	16	-	3 and 4
University of Oslo, Faculty of Social Sciences	306	13	1, 2, 3, 4, 5 and 6
University of Stavanger	172	7	4, 4 and 6
University of Tromsø, Faculty of Biosciences, Fisheries	76	2	2, 4 and 6
University of Tromsø, Faculty of Humanities, Social Sciences and Education	58	4	1, 2, 3 and 5
VID Specialized University	26	3	4 and 5
Western Norway Research Institute	7	1	1
42 units	3005 researchers	136 research groups	

*** Panels:**

1= Geography

2= Economics

3= Political Science

4 = Sociology

5 = Social Anthropology

6 = Economic-Administrative Research Area

Appendix C: Institutional self-assessment, level 1 and level 2

Institutional self-assessment - Guidelines

The self-assessment form consists of two levels:

1. The research institution
2. The research discipline(s) corresponding to the panel

In this evaluation, the term 'research institution' refers to either an independent research institution/research institute or to the faculty-level of a higher education institution. The research institution is responsible for the self-assessment at both level 1 and 2.

For each panel, the self-assessment should include information on both the research institution (level 1) and the relevant research discipline(s) (level 2) participating in the evaluation. Level 2 will in several cases cut across organisational units, but the rationale is to highlight each discipline corresponding to the panel.

List of panels:

Submitting the self-assessments

Panel 1	Geography
Panel 2	Economics
Panel 3	Political science
Panel 4	Sociology
Panel 5	Social anthropology
Panel 6	Economic-administrative research

The self-assessments, including all attachments, should be submitted as an editable pdf-document by e-mail to sameval@forskningsradet.no no later than **10. March 2017**.

Please write in English and avoid using abbreviations or acronyms that are not standard.

Format of the pdf-document

Documents should use Times New Roman 12-points font size and be structured as follows – with all the attachments after the Self-assessment form:

Front page with the name of the research institution	
List of contents	Use the chapter titles indicated in the outline on p. 2-4 of these guidelines
Self-assessment research institution (level 1)	<ul style="list-style-type: none"> • Self-assessment form level 1 • Fact sheet including organisational map and list of funding sources • SWOT analysis
Self-assessment research discipline/ panel (level 2)	<ul style="list-style-type: none"> • Self-assessment form level 2 • Form 1: Number of positions that have been announced during the past three years and the number of qualified applicants • Form 2: Audience of scientific publications • Excel-file: Overview of study programmes • Form 3: Research matching the priorities in the Norwegian Government's <u>Long-Term Plan for Research and Higher Education</u> and other relevant policy documents • List of 10 most important publications • List of 10 most important dissemination and knowledge exchange results
The societal impact of the research – case studies (level 2)	<ul style="list-style-type: none"> • List of cases studies attached in separate pdf-documents • The names of the case study documents should be in the following format: SAMEVAL[institution]-[research discipline/panel]-case[number or short name]

Self-assessment level 1

1. The Research institution (indicative number of pages)

1.1 Organisation & strategy (3 pages)

- a. Describe how the research institution is organised by 01.01.2017 (refer to organisational map in the **fact sheet**). If relevant, you may expand on recent organisational changes in a separate item (see item 1.2)
- b. Describe briefly the governing structure of the institution, focusing on the delegation of responsibilities for research, knowledge exchange and, if relevant, education, within the organisation.
- c. Present briefly the institution's strategic aims for the next 5-10 years. Include current prioritised research areas.
- d. Describe current strategies for national and international research collaboration, as well as for collaboration with non-academic partners (private, public or 'third' sector).
- e. For those who have been evaluated by the RCN within the last 15 years: Describe how the evaluations have been followed up by the institution. Institutions may refer to previous reporting to the RCN where relevant.
- f. Give a **SWOT analysis** (Strengths, Weaknesses, Opportunities and Threats) of the institution using the enclosed template.

1.2 Organisational changes, if relevant (1 page)

Describe recent organisational changes, or planned reorganisations, and the reasons for these changes. Implications of ongoing merging-processes for organisation, governing structures and strategic aims should be described.

1.3 Resources & infrastructure (1 page)

- a. Give an overview of the resources of the institution by filling in the enclosed **fact sheet**.
- b. Describe major research infrastructures (such as databases, archives, laboratories and scientific collections) at the research institution, detailing any important upgrades over the past 5-10 years and/or new equipment needs. Refer to [Norway's national strategy for research infrastructure 2012-2017](#) where relevant.

1.4 Gender, mobility and career paths (1 page)

- a. Describe the research institution's policy for gender equality, and how this is followed up.
- b. Describe the institution's policy for mobility and career paths. Include to what extent researchers are recruited from other Norwegian and/or international institutions. Where relevant, please describe policies for international collaboration and career planning for PhD-students and postdocs.

- c. Has the institution implemented the European Charter & Code and been awarded the brand "HR Excellence in Research", or will the European Charter & Code be implemented soon? If not, please elaborate on the reason for this.

Self-assessment level 2

2. Research discipline(s) corresponding to the panel

2.1 Employment (2 pages)

- a. Please describe plans for recruitment within the research discipline.
- b. Give an overview in **Form 1** of the number of positions that have been announced within the research discipline during the past three years (2014-2016) and the number of qualified applicants (all levels). Include to what extent researchers are recruited from other institutions in Norway or internationally.
- c. If relevant, please describe how the PhD training is organized and to what degree PhD students are included in larger projects within the research discipline.
- d. Indicate the normal distribution of time between research, teaching and other activities (administrative tasks, project acquisition etc.) for all academic positions and policies for redistribution of tasks between staff.
- e. If relevant, describe the policy for research leave/sabbatical leave for academic staff.

2.2 Scientific quality (3 pages)

- a. Give a brief overview of the research activities and research groups within the research discipline. Please provide details of the most important contributions to the larger research community over the last 5-10 years. Please include a list of the most important publications resulting from the research in this period (maximum ten publications).
- b. Describe strategies for research development within the discipline, including strategies for scientific publications.
- c. Please estimate the primary audience of your scientific publications in **Form 2**.
- d. Please describe the significance of external research funding to the development of scientific quality within the research discipline.

2.3 Gender perspectives (1 page)

- a. Describe the extent to which gender perspectives are integrated in the research within the discipline, providing examples of relevant projects and/or publications.
- b. Please identify a contact person for forthcoming mapping of gender research in Norway.

2.4 If relevant: Interplay between research and education (1 page)

- a. Indicate the linkages between the research within the panels of the evaluation and the study programmes offered by the institution. Use the enclosed **excel file** to indicate the study programmes based on the teaching activities of the researchers to be evaluated by the panel. If applicable, list research groups that are linked with the study programmes.
- b. To what extent are students involved in staff research? Describe how and on what levels.
- c. Indicate the main challenges for optimizing the interplay of education and research within the discipline and the measures taken to meet these challenges.

2.5 Societal relevance (2 pages)

- a. Please indicate the relevance of the research within the discipline for the thematic priorities set out in Norwegian Government's Long-Term Plan for Research and Higher Education or list other relevant policy documents in **Form 3**.
- b. Describe strategies for dissemination, user-involvement and knowledge exchange, identifying any particular obstacles to achieving these aims within the discipline.
- c. Please provide a list of ten important examples of dissemination/knowledge exchange activities of the research unit from the last 5-10 years.

2.6 Impact case studies

The institution is invited to document examples (cases) of the impact of their research beyond academia, according to the definitions provided in the attached form.

Please note the following requirements for reporting impact:

- a. The research underpinning the impact cases should be anchored within the research institution.
- b. Both the research and the impact should have been produced within the last 10 – 15 years. Priority should be given to more recent examples. Special circumstances may allow for extending the given time interval when necessary to explain longer research traditions relevant to the reported impact. In such cases, great importance should be attached to documenting tangible impacts within the time frame provided.
- c. Each research institution is invited to submit one case per research discipline. If desired, the institution may submit further cases for evaluation, limited upwards to one case per ten researchers participating on one panel.

2.7 Other information

Include any other information that you consider relevant for this evaluation.

Attachments

- Fact sheet, including organisational map and list of funding sources
- SWOT analysis
- Form 1: Number of positions that have been announced during the past three years and the number of qualified applicants.
- Form 2: Audience of the results of scientific publications
- Form 3: Research matching the priorities in the Norwegian Government's Long-Term Plan for Research and Higher Education and list of other relevant policy documents
- List of 10 most important publications
- List of 10 most important dissemination and knowledge exchange results
- Template for case studies: The societal impact of the research

Excel-file: Overview of study programmes

FACT SHEET (level 1)

1. Research institution:

⇒ **Organisation Chart** (to be attached)

Table 1: R&D expenditures and sources of funding (1000 NOK)

Type of expenditures	2014	2015	2016
Research personnel (salaries including social costs)			
Other personnel (salaries including social costs)			
Other running costs			
Total expenditures			
Types of funding			
Core funding from the Norwegian government			
External funding from RCN			
External funding from other public Norwegian sources			
External funding from other private Norwegian sources			
External funding from the EU			
External funding from other international public sources			
External funding from other international private sources			
External funding as % of total expenditures			

⇒ Please specify **main funding sources** (funders & programmes) in an attachment

Table 2: Number of PhDs graduated at the institution per year

	2014		2015		2016		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
<i>PhDs graduated within:</i>								
Panel 1 Geography								
Panel 2 Economics								
Panel 3 Political science								
Panel 4 Sociology								
Panel 5 Social anthropology								
Panel 6 Economic-administrative research								
Total								

2. SWOT analysis

Research institution:

Give a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) of the institution.

Factors related to the organisation of research, available resources for research and the research activities themselves may be included.

STRENGTHS		WEAKNESSES	
Organisation			Organisation
Resources			Resources
Research			Research
Organisation			Organisation
Resources			Resources
Research			Research
OPPORTUNITIES		THREATS	

Form 1 **Number of positions that have been announced during the past three year (2014-2016) and the number of *qualified* applicants (all levels).**

	2014		2015		2016	
Position	Announced	Applicants	Announced	Applicants	Announced	Applicants
Ph.D.						
Post.doc						
Permanent positions						

Form 2 **Roughly estimate which audience the results of your scientific* publications primarily are intended for (in percentage)**

The total of all categories should amount to 100%

The evaluation panel will use this as background information to interpret publication citation data for the institution.

	Within the academic discipline(s)	Beneficiaries outside the academic community
National audience	X%	X%
International audience	X%	X%

* Limited to peer reviewed publications according to the definition in CRISin.

Form 3 **Long –Term Plan for Research and Higher Education**

In the Long-term plan (LTP) for research and higher education 2015–2024, the Norwegian government has identified six long-term priority areas:

1. Seas and oceans;
2. Climate, environment and clean energy;
3. Public sector renewal, better and more effective welfare, health and care services;
4. Enabling technologies;
5. Innovative and adaptable industry;
6. World-leading academic groups.

Please use **table 3** to list the most relevant active research projects addressing one or more of these priority areas. (The table can be expanded if necessary):

Table 3: Research projects addressing priority areas of the LTP

Institution	Panel	Priority area of the Long-term plan for research and higher education	Research project (please include title of project, size in terms of researchers and budget, time frame)

Please list other policy documents with strategic relevance for your research – if applicable:

- 1.
- 2.
- 3.
- 4.
- 5.

List of 10 most important publications the last 5-10 years

Use Times New Roman 11-points font size for this list.

The research institution may submit publications from individual researchers as part of the self-assessment. Reference to the submitted publications should be made under the description of the relevant research discipline in the self-assessment (paragraph 2.2 Scientific quality).

Publications to be submitted <i>Please provide full reference including DOI or URL for openly accessible publications*</i>	DOI, URL or filename	Indicate pages to be read (if applicable)**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

*) Publications that are not openly accessible should be attached as a PDF-file.

**) For monographs and other publications **exceeding 30 pages** the main ideas and findings of the publication should be indicated. The selected chapter(s) should not exceed 50 pages.

List of 10 most important dissemination and knowledge exchange results the last 5-10 years

Use Times New Roman 11-points font size for this list

Specific guidelines: Results of dissemination and knowledge exchange activities directed towards the public or different user-groups. This could be popular science publications, grey literature, books or articles, reports, contributions to media, products or information material.

<i>Title</i>	<i>Category*</i>	<i>Reference of sources</i>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

*Use categories for registration in CRIStin

The societal impact of the research – template for case studies³³

Guidelines

The impact of the research is defined as any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment and quality of life, beyond academia. Impact includes, but is not limited to, an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally.

Effects on other research or effects within the submitting institution (for instance the effects on teaching within the institution) are not to be reported as impact cases.

How to report and submit impact-cases?

Use the template on the next page to report the impact. Please copy the form for the submission of more than one impact case, so that only one case is reported per form.

- ⇒ Each case-study should be clearly named and saved in a separate pdf-file and attached to the self-assessment for the appropriate panel.
- ⇒ The name of the file for each case study should be as follows:
SAMEVAL [institution]-[number of research panel]-[short case name]

³³ The following is inspired by the 2014 evaluation of research in UK higher education institutions (the Research Excellence Framework REF, see www.ref.ac.uk).

Template for case studies: The societal impact of the research

Institution:
Research discipline/panel:
Case number or short name (max 10 characters):
Name of impact case:
Summary of the impact (maximum 100 words)
Description of the research underpinning the impact: (maximum 400 words.) (Include names of key researchers and, if relevant, research groups. A time frame for when the research was carried out should also be included).
Details of the impact (maximum 400 words) (Include a description of how the research has contributed to the impact on society).
References to the research (scientific publications)
References to sources to corroborate the claims made about the impact (publications, reports, media items, policy papers, etc.)
If relevant: External references (external users or others who have witnessed the impact and could be contacted to corroborate the claims made in the reported research cases).

Appendix D: Innmelding av forskergrupper

SAMEVAL Innmelding av forskergrupper

Veiledning til institusjonene desember 2016

Institusjoner som har meldt inn forskere til evalueringen av norsk samfunnsvitenskapelig forskning har mulighet til å melde inn forskergrupper til evalueringen. Forskergruppene vil bli gjenstand for en nærmere vurdering av internasjonale fagekspertter.

1.1 Kriterier for innmelding av forskergrupper:

Forskergrupper kan meldes inn dersom de oppfyller følgende kriterier:

Kriterier	Beskrivelse
Forskning på høyt internasjonalt nivå	Dokumentert gjennom publikasjoner i sentrale internasjonale publiseringskanaler. En eller flere av gruppens medlemmer kan de siste 5 år eksempelvis ha: <ul style="list-style-type: none">- vært invitert foredragsholder (key note) på internasjonale konferanser- hatt gjesteforskeropphold i utlandet- hatt oppgaver som fagfelle i vurdering av publikasjoner, forskningsprosjekter eller andre faglige verv utenfor Norge- vært leder av eksternt finansiert prosjekt- deltatt i internasjonalt forskningssamarbeid (f.eks. dokumentert gjennom prosjektsamarbeid, sampublisering, eller deltakelse i redaksjoner eller faglige komiteer utenfor Norge)
Minst 5 medlemmer	<ul style="list-style-type: none">- 3 av 5 medlemmer må være ansatt ved institusjonen som melder inn gruppen og minst 2 av disse må være fast vitenskapelige ansatte- 2 eller flere medlemmer kan være ansatt ved andre nasjonale eller internasjonale institusjoner dersom forrige kriterium er oppfylt
Ha en organisering og et formål som lar seg beskrive i egevalueringsskjemaet	Se vedlagte egevalueringsskjema (self assessment) for forskergrupper
Er innmeldt i CRIStin	Forskergrupper skal meldes inn ved å opprette en forskergruppe i CRIStin. Se vedlagte veiledning.

Begrensninger for innmelding av forskergrupper:

- Hver institusjon har mulighet til å melde inn **én forskergruppe per panel**.
- Institusjoner som har meldt inn 20 eller flere vitenskapelig ansatte til evalueringen har samtidig mulighet til å melde inn **én ekstra gruppe per 20 vitenskapelig ansatte**.
- Forskere kan bare meldes inn til én forskergruppe i denne evalueringen, men deltakelse i flere forskergrupper kan synliggjøres i skjemaet "Research group members and financing".
- Institusjoner som melder inn en forskergruppe kan synliggjøre samarbeid med forskere ved andre institusjoner ved å legge dem til i skjemaet "Research group

members and financing". Dette kan gjøres gjensidig slik at forskere som telles ved den ene institusjonen ikke teller ved den andre.

1.3 Dokumentasjon av forskergruppene

Institusjonene skal levere inn følgende dokument (på engelsk) per gruppe:

Dokumenter	Innhold:	Navngivning av fil:
Research group members and financing	<p>Excel fil hvor følgende fire arkfaner skal fylles inn:</p> <p style="text-align: center;"> Research group overview / Listed members / Other members / Funding </p> <p>Research group overview:</p> <ul style="list-style-type: none"> - Navn på institusjon som melder inn gruppen - Navn på gruppe: Samsvarer med navn i CRISTin - URL til registrert forskergruppe i CRISTin. - Navn på gruppeleder. <p>Listed members:</p> <ul style="list-style-type: none"> - Navn på innmeldte medlemmer med opplysning om stilling, forskningstid i gruppe, institusjon, alder, kjønn, PhD-givende institusjon - Tittel på publikasjoner med referanse til innsendt PDF eller en Open Access lenke, type publikasjon og sidehenvisning. <p>Other members:</p> <ul style="list-style-type: none"> - Medlemmer som er meldt inn til andre forskergrupper i SAMEVAL ved egen institusjon eller ved andre institusjoner. - Medlemmer som er meldt inn til evalueringen av humanistisk forskning (HUMEVAL) eller utdanningsforskning (UTDEVAL). - Medlemmer fra Norge som ikke er innmeldt til noen av evalueringene. - Medlemmer fra utlandet. <p>Funding:</p>	1. Research group members and financing.xlsx

	Oversikt over eksterne finansieringskilder. Beløpene som oppgis skal være et anslag basert på aktivitetsnivå 2012-2016.	
2. Self-assessment	Se vedlagte mal. Punkt 1.1-1.5 og punkt 1.7 skal fylles ut.	2. Self assessment.pdf
3. Societal impact	Forskergruppene inviteres til å dokumentere eksempel på forskningens samfunnsbidrag. Eksempelet skal hentes fra forskningsgruppens aktiviteter og være i kjernen av gruppens faglige virksomhet.	3. Impact case study.pdf
4. Curriculum vitae	Se vedlagte mal. Det skal leveres ett skjema per grupped medlem (dette gjelder alle grupped medlemmer og ikke bare innmeldte medlemmer).	4. Curriculum vitae [etternavn].pdf
5. Publikasjoner	<p>- Medlemmer som er meldt inn til evalueringen kan levere én vitenskapelig publikasjon i fulltekst.</p> <p>- Dersom publikasjonen overskrider 50 sider, skal man i dokumentet "researcher group members and financing" indikere hvilke sider som vektlegges (max 50).</p> <p>- En digital kopi av publikasjonen legges ved i PDF-format. Alternativt legges det ved lenke til vitenskapelige arbeid som er åpent tilgjengelig (Open Access). NB! Enkelte publikasjoner kan fremstå som fritt tilgjengelige ved den enkelte institusjon uten å være det (betalt abonnement).</p>	5. Publication [etternavn].pdf

1.4 Innlevering

Fristen for innmelding av forskergrupper og innsending av dokumentasjon er satt til **fredag 10. februar 2017**.

Informasjon om forskergruppene skal sendes inn til Forskningsrådet på e-postadressen sameval@forskningsradet.no på følgende måte:

- 1) Det skal sendes én e-post per forskergruppe som inkluderer alle vedlegg for gruppen.
- 2) Med unntak av "research group and financing" (Excel-format) skal alle vedlegg være i PDF-format (maskinlesbar og ikke skannet versjon).
- 3) Tittel på e-posten skal være som følger:
SAMEVAL [navn på institusjon]-[navn på forskergruppe]

NB! Store forsendelser kan med fordel deles inn i flere e-poster, eller sendes ved hjelp av [UNINETT FileSender](#).

1.5 Kontaktpersoner i Forskningsrådet

Seniorrådgiver Heidi Dybesland, sameval@forskningsradet.no, telefon 22037142

Seniorrådgiver Hedvig Buene, sameval@forskningsradet.no, telefon 22037242

Seniorkonsulent Helene Sophie Aanerud, sameval@forskningsradet.no, telefon 22037547

Vedlegg:

- SAMEVAL **Research group members and financing (excel file)**
- SAMEVAL **Research group self-assessment**
- SAMEVAL **Research group - Impact case study (optional)**
- SAMEVAL **CV mal**
- SAMEVAL **Bruerveiledning for registrering i CRISStin**

Appendix E: Research group self-assessment

Research group self-assessment

Maximum 5 pages pr. group.

1.1 Organisation, leadership, strategy and resources

- a. Please give a brief account of the establishment and the development of the research group.
- b. Please describe the leadership and organisation of the research group.
- c. Please describe the scientific goals of the research group and the strategy for scientific publication and knowledge exchange, including cooperation with non-academic partners.
- d. Please describe how the research group contributes to the strategic goals of the host institution.
- e. To what extent does the research group incorporate external funding as a factor in its strategic planning? And, if relevant: please comment briefly on the support from the host institution in the development and running of externally funded projects.
- f. To what extent does the host institution assist the research group in providing relevant research infrastructure, such as databases, scientific collections or experimental facilities?

1.2 Research profile and quality

- a. Please describe the research activities and the research profile of the group.
- b. Please describe how the research group has contributed to the development of the state of the art within its field. Examples of contributions may include (but are not limited to) theoretical and methodological developments, new empirical findings, interdisciplinary developments and production of datasets.

1.3 Recruitment and training

- a. How does the research group contribute to recruitment and career development for temporary or permanently employed academic staff/researchers?
- b. Please describe how PhD-students and postdoctoral fellows are recruited to the research group, nationally or internationally.
- c. What is the group's contribution to the training and mentoring of PhD-students and postdoctoral fellows?
- d. Please describe the extent to which PhD students and postdoctoral fellows participate in international exchange programmes (including time spent at research institutions abroad).
- e. To what extent do PhD-students take part in collaboration with partners outside of academia?

1.4 Networking

- a. Please describe how the research group engages in research collaboration. Collaboration may include (but is not limited to) cooperation across faculty divisions,

across institutions, with partners outside of academia or international cooperation.

1.5 Impact on teaching (if relevant)

- a. Please describe how the research group contributes to educational activities.
- b. How much time does the research group spend on teaching?

Fill in the table below and add a comment if necessary

	Name of study programme	Approximate time spent on teaching by research group members per year (hours including preparation)
BA-level		
MA-level		
PhD-level		
Other		
Comment		

1.6 Other information

Include any other information that you consider relevant for this evaluation.

Curriculum vitae **MAX 1 page**

Research group		Panel #	
Name:		CRIStin ID	
Sex:		Birth year:	
Nationality:			
Academic position:			
Former academic positions (last 5 years)			
Academic degrees	<i>Degree, university and year:</i>		
Number of PhD-students (if relevant)		As main supervisor:	As co-supervisor:
Under supervision			
Completed degrees 2006-2016			
Number of publications		2007-2011	2012-2016
Peer-reviewed monographs			
Articles in peer-reviewed journals			
Book chapters			
Academic commentary editions			
Exhibition catalogues			
Translations (related to research area)			
Textbooks for educational purposes			
Popular scientific books			
Popular scientific articles			
Reports			
Please rank your three most important publications since 2007	<ol style="list-style-type: none"> 1. 2. 3. 		

Research group - Impact case study (optional)

The research group may document examples (cases) of the impact of their research beyond academia. The impact of the research is defined as any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment and quality of life, beyond academia. Impact includes, but is not limited to, an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally.

Effects on other research or effects within the submitting institution (for instance the effects on teaching within the institution) are not to be reported as impact cases.

How to report and submit impact-cases?

Please note the following requirements for reporting impact:

- The research underpinning the impact cases should be anchored within the research group.
- Both the research and the impact should have been produced within the last 10 – 15 years. Priority should be given to more recent examples.
- Use the template on the next page to report the impact. Please copy the form for the submission of more than one impact case, so that only one case is reported per form.
- Each case-study should be clearly named and saved in a separate pdf-file and attached to the self-assessment for the research group.
- The name of the file for each case study should be as follows:
SAMEVAL [institution]-[research group]- [short case name]

Template for case studies

Name of impact case: (max 10 characters)
Summary of the impact (maximum 100 words)
Description of the research underpinning the impact: (maximum 400 words.) (include names of key researchers in the group. A time frame for when the research was carried out should also be included).
Details of the impact (maximum 400 words) (include a description of how the research has contributed to the impact on society).
References to the research (scientific publications)
References to sources to corroborate the claims made about the impact (publications, reports, media items, policy papers, etc.)
If relevant: External references (external users or others who have witnessed the impact and could be contacted to corroborate the claims made in the reported research cases).

Appendix F: DAMVAD Fact sheet for Economic-Administrative Research Area

On the factsheets from Damvad Analytics

The Factsheets are appendices to the Damvad Analytics's report *Social Science in Norway – Statistical analysis of publications and research personnel*, containing publication and research personnel statistics, and an analysis of social sciences in Norway. This factsheet presents a number of key indicators for each of the six evaluation panels, based on the listed individuals and their affiliations. The data presented summarize results for the last three years, 2014-2016. Please refer to the main report for descriptions of the data and method underlying the analyses.

Variables/indicators:

The indicators are based on the listed individuals and their affiliations. The data presented summarize results for the latest three years 2014-2016. Each factsheet shows indicator values for each of the institutions participating in the evaluation, for the research field in total and social science in Norway.

- **Number of NPI pub:** Total number of publications – counting publication qualified for being included in the Norwegian Publishing indicator
- **Pub Points:** Total publication points according to the Norwegian Publishing indicator
- **Number of listed individuals:** Total number of listed individuals per participating institution and faculty, not included are non-publishing individuals.
- **Share of L1 journals:** Share of NPI level 1 publications for NPI journal publications
- **Share of L2 journals:** Share of NPI level 2 publications – for NPI journal publications
- **Share of L1:** Share of NPI level 1 publications – for the total number of NPI publications
- **Share of L2:** Share of NPI level 2 publications – for the total number of NPI publications
- **PP per listed individuals:** Publication points per listed researcher – measuring the ratio of publication points per individual at each institution. The numbers may in some cases include individuals with more than one affiliation and/or individuals that are no longer affiliated with the given institution.
- **Avg. SJR:** SJR average for NPI publications indexed in Scopus
- **Avg. SNIP:** SNIP average for NPI publications indexed in Scopus
- **Impact OECD:** Impact relative to OECD – measured as Field Normalized Citation Score
- **Impact Norway:** Impact relative to Norway – measured as Field Normalized Citation Score
- **Impact Nordic:** Impact relative to the Nordic countries – measured as Field Normalized Citation Score.

Abbreviation	Description
SNIP	Source Normalized Impact per Paper (SNIP) SNIP measures the citation impact by normalising the citations based on the total number of citations in the research field. SNIP has the advantage of allowing direct comparison of publication sources in different subject fields. This makes it possible to compare the publication output across the diversified set of institutions.
NPI publications	The Norwegian Publication Indicator (NPI) Publications qualified to be included in the NPI are used as the basis for the performance-based basic funding system employed in Norway to distribute funding between institutions in the higher education sector as well as to the research institutes.
SJR	SCImago Journal ranking (SJR) The SJR takes into account both the number of citations received by a journal title and the prestige of the journal titles where such citations originate. As such the SJR indicator is a variant of the eigenvector centrality measure used in network theory. Here the measure establishes the importance of a node in a network, based on the principle that connections to high-scoring nodes contribute more to the score of the node.
Scientific Impact - FNCS	Field Normalized Citation Score (FNCS) The FNCS indicator considers differences in publication patterns for different scientific fields, publication types, and publication year. Finally, as an extra precaution to avoid overestimating the citation counts, we exclude self-citations, i.e. authors citing their own work. In calculating the scientific impact for each of the participating institutions relative to the average of Norway, the Nordic countries and OECD. As the average for the three benchmarks is equal to one, a value of e.g. 1.25 indicates that these publications receive 25 percentage point more citation than average.

Economic-administrative Research Area

Institution	Number of NPI pub	Pub Points	Number of listed individuals	Share of L1 journals	Share of L2 journals	Share of L1	Share of L2	PP per listed individuals	Avg. SJR	Avg. SNIP	Impact OECD	Impact Norway	Impact Nordic
BI	489	380.80	127	82%	18%	74%	26%	3.00	1.28	1.38	0.94	0.98	0.88
HiB	41	30.09	16	82%	18%	83%	17%	1.88	1.25	1.33	0.99	1.19	1.01
HiHm	69	38.17	22	90%	10%	87%	13%	1.74	0.82	1.20	1.94	0.99	1.14
HiL	35	16.62	15	100%	0%	97%	3%	1.11	0.96	1.08	1.80	1.64	1.62
HiM	67	35.01	32	89%	11%	82%	18%	1.09	0.85	0.90	1.48	1.11	1.09
HiOA-SVA	101	56.61	34	84%	16%	85%	15%	1.67	1.03	1.3	1.01	1.11	0.86
HSN	70	40.03	34	89%	11%	84%	16%	1.18	0.90	1.06	1.06	1.27	1.09
IRIS	43	24.62	14	84%	16%	84%	16%	1.76	0.63	1.04	0.90	0.91	0.80
NF	28	13.99	12	93%	7%	64%	36%	1.17	1.33	1.14	0.73	0.86	0.83
NHH	363	262.50	168	77%	23%	75%	25%	1.56	1.62	1.38	1.06	1.03	0.98
Nord - HHN	163	105.10	65	87%	13%	80%	20%	1.62	1.05	1.01	1.20	0.88	1.13
NiH	61	33.47	10	93%	7%	70%	30%	3.35	0.69	1.15	1.32	1.23	1.20
NMBU - HH	44	25.86	18	97%	3%	91%	9%	1.44	0.85	1.19	0.96	1.00	1.00
NTNU - ØK	413	237.80	153	77%	23%	81%	19%	1.55	0.53	1.28	1.00	0.88	0.82
TØI	33	30.03	13	68%	32%	70%	30%	2.31	1.07	1.45	0.80	0.92	0.78
UiA - HH	105	60.78	38	96%	4%	90%	10%	1.60	0.72	0.98	0.97	0.92	0.81
UiA - SV	101	56.86	23	84%	16%	89%	11%	2.47	0.67	1.14	1.08	1.04	1.17
UiO - SV	96	58.93	39	73%	27%	68%	32%	1.51	1.07	1.21	1.10	1.02	0.82
UiS	230	133.70	77	86%	14%	80%	20%	1.74	1.10	1.12	1.04	0.93	0.93
UiT - BFE	163	98.70	51	91%	9%	85%	15%	1.94	1.05	1.09	0.89	0.79	0.79
Economic-administrative	2514	1781.00	788	83%	17%	79%	21%	2.26	1.11	1.26	1.02	0.98	0.92
Social Science in Norway	8945	7418.20	2611*	78%	22%	74%	26%	2.84	1.51	1.46	1.12	1.02	1.00

Source: DAMVAD Analytics 2017, based on data from Scopus, CRISTin and Research Council Norway.

Note: *) The total number of listed individuals 2611 does not include the 326 non-publishing individuals

Appendix G: Time frame for collected self-assessments and bibliometric data

Institutional self-assessment

Level 1 The Research institution	1.1 Organisation & strategy	
	1.1.c	the institution's strategic aims for the next 5-10 years
	1.1.e	the institutions who have been evaluated by the RCN within the last 15 years
	1.2 Resources & infrastructure	
	1.2.b	important upgrades over the past 5-10 years and/or new equipment needs.
	FACT SHEET	
	Table 1	R&D expenditures and sources of funding (2014-2016)
	Table 2	Number of PhDs graduated at the institution per year (2014-2016)
	Level 2 Research discipline(s) corresponding to the panel	2.1 Employment
2.1.b		number of positions that have been announced within the research discipline during the past three years (2014-2016) and the number of qualified applicants (form 1)
2.2 Scientific quality		
2.2.a		most important contributions to the larger research community over the last 5-10 years. Please include a list of the most important publications resulting from the research in this period
2.3 Societal relevance		
2.3.c		ten important examples of dissemination/knowledge exchange activities of the research unit from the last 5-10 years.
2.4 Impact case study		
2.4.b		the research and the impact should have been produced within the last 10 – 15 years.

Research group self-assessment

CV	former academic positions	Last 5 years
	number of PhD- students with completed degrees	Between 2006-2016
	number of publications	Between 2007-2011 and 2012-2016
	your three most important publications	Since 2007
Impact case		
	the research and the impact should have been produced within the last 10 – 15 years.	

Bibliometric data

Research personnel data	The data used for the analysis of the research personnel covers the period 2005 to 2015.
Publication data	The data collected from CRIStin will cover the period from 2011 to 2016.
	The Scopus enhanced data will cover publications between 2011 and 2016. However, to ensure robustness of the citation analysis, publications published internationally after 2016 will not be included when assessing citations and impact.

Appendix H: Template for assessments of the units: institutions and research groups

1. [NAME OF INSTITUTION]

SECRETARIAT: A short introduction on establishment and development of the institution and its organization.

SECRETARIAT: Fact sheet

1.1 Evaluation of [Institution]

1.1.1 Organisation, leadership and strategy

ASSESSMENT: overall reasoning

- How do you review the leadership of the research area on an institutional level?
- Does the institution have adequate goals and a suitable or an unsuitable strategy to reach them?
- How do you consider the institutions' strategic focus (or lack thereof), taken into account its publication strategies, the national and international research collaboration?
- How does the institute make use of external research funding? Are the use of this funding reasonable, and/or is there room for improvements?

1.1.2 Institutional following up on previous evaluations

ASSESSMENT: overall reasoning

- Consider conclusions and recommendations from previous evaluations, and give your opinion on the way the reviews have been followed up.

1.1.3 Research environment (if relevant)

ASSESSMENT: overall reasoning

- How do you review the institutions policy for maintaining a fruitful environment for production and exchange of knowledge? (i.e. seminars, summer schools, guest lectures and scholars, etc)

1.1.4 Resources and infrastructure

ASSESSMENT: overall reasoning

- Does the institution provide adequate resources and infrastructure?
- Does the research area make good use of these?

1.1.4 Research personnel

ASSESSMENT: overall reasoning

- Are the area's hiring and career development practices consistent with best practice?
- Are PhD candidates, post-docs and junior faculty adequately trained and mentored?
- Has the institution implemented the European Charter and code and been awarded the brand "HR Excellence in Research, or what are the plans to implement the Charter?
- Is there a transparent career path?
- Is there sufficient national and international mobility of researchers?

- Is the balance among the research personnel appropriate in terms of gender, age and diversity?

1.1.5 Research production and scientific quality

ASSESSMENT: reasoning

Numerical scale, scientific quality, 5-1 (excellent–weak)

- To which extent does the institution pursue policies to improve and facilitate scientific performance of high quality?
- How is the productivity, the degree of originality and international profile?
- Evaluation of the cases from the institutions in the research area
- Has the institution contributed to advancing the state of the art in the research area /scientific discipline/ to interdisciplinary production of knowledge?
- How does the institution make use of interdisciplinary approaches, when these are relevant?

1.1.6 Interplay research-education: impact on teaching

ASSESSMENT: overall reasoning

- How is the balance between teaching and research?
- Are there established linkages between the research and the study programmes offered by the institution?
- Does the institution have a focus /strategy to secure / improve the interplay of teaching and research?
- How are eventual challenges addressed and handled?
- To what extent are students involved in staff research?

1.1.7 Societal relevance and impact

ASSESSMENT: reasoning + identify best cases

- Does the institution have strategies for dissemination, user-involvement and knowledge exchange? How do you review the strategies?
- Does the institution document relevant dissemination/knowledge exchange activities?
- Does the ongoing research at the institution have a linkage/association to thematic priorities set out in the Norwegian Government's Long-Term Plan for Research and Higher Education and other relevant policy documents?
- To what extent does research in the area benefit the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia? What is your overall view?

1.1.8 An overall review on profile, scientific quality and impact on institutional level

ASSESSMENT: overall reasoning

1.1.9 Feedback

1.2 Evaluation of [Research group A]

Short description of the research group.

ASSESSMENT: overall score 5-1

1.2.1 Organisation, leadership and strategies

ASSESSMENT: overall reasoning

- How do you review the leadership of the research group?
- How do you view the group's intellectual focus and strategy to reach them? Please take into account its publication strategies, the national and international research collaboration.
- Does the group make use of external research funding, and eventually how? Are the use of the external funding reasonable, and/or is there room for improvements?
- Does the research group contribute to the institution's overall goals or not?
- To which extent does the institution pursue policies to improve and facilitate scientific performance of high quality?
- Does the institution provide adequate resources and infrastructure, and how does the research group make use of them?

1.2.2 Research personnel: including recruitment, training, gender balance and mobility

ASSESSMENT: overall reasoning

- How is the group's hiring and career development practices? Are they consistent with best practice?
- How do you view the training and mentoring of PhD candidates and post-docs?
- Is the balance among the research personnel appropriate in terms of gender, age and diversity?
- How is the national and international mobility of researchers? Is it sufficient /insufficient and in which way(s)?

1.2.3 Research production and scientific quality

- How is the productivity of the research group, the degree of originality and its international profile?
Has the group contributed to advancing the state of the art in its discipline(s)? If yes, how?
- Does the group make use of interdisciplinary approaches, where these are relevant? How?
- How do you review the quality of the research overall?

1.2.4 Networking

ASSESSMENT: overall reasoning

- Does the group make good use of collaboration, nationally and internationally, to advance its strategy and produce high-quality, relevant research?

1.2.5 Interplay research-education: impact on teaching (if relevant)

ASSESSMENT: overall reasoning

- Does the research group contribute to educational activities?
- To what extent is the research of the group relevant for the study programmes at the host institution or other institutions?

1.2.6 Societal relevance and impact (if relevant)

ASSESSMENT: overall reasoning

- Does the research group document relevant dissemination/knowledge exchange activities?
- To what extent does research in done by the research group benefit the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia? What is your overall view?

1.2.7 Overall assessment

ASSESSMENT: overall reasoning

- What is the overall profile, and scientific quality of the research group?
- To what extent is the research group linked to / have an impact on the research environment at its institution?
- What is the overall significance of the research group in a national research area context?

1.2.8 Feedback

Appendix I: Template for an assessment of the ten most important publications listed by the institutions

Template for an overall assessment of the ten most important publications listed by the institution

The institutions have been invited to submit a list of ten most important publications. These publications are listed as the attachment of the institutional self-evaluation, and also available as pdf or open access links for further information.

The assessor should provide an overall assessment of these listed publications by the institution. The assessment is overarching, however, the publications can be consulted if/when relevant.

The overall assessment should be provided with the grading scale for scientific quality, along with reasoning.

Note that not all of the questions involve a quality criterion (for instance, to what extent are the publications interdisciplinary or co-authored does not imply a normative judgement), these criteria are proposed to link the assessment of publications to the overall assessment of the institutional aims and strategies for the field.

How would you assess the selected publication outlets (i.e. significance and quality of journals, publishers, book series)?
How would you assess the originality and significance of the publications within its designated field, nationally and/or internationally?
Are the submitted ten publications representative of the discipline in this institution? (i.e. do the publications represent few/many of the researchers and sub-themes of the discipline in this institution?)
<i>If relevant:</i> To what extent do the publications contribute to interdisciplinary research?
<i>If relevant:</i> To what extent do the publications include co-authoring with significant researchers on the field (nationally and internationally)?
To what extent do the publications reflect the stated thematic, theoretical and/or methodological foci of the institution?
How would you in broad terms assess these ten publications?

Appendix J: Template for an assessment of the publications of listed members at the research groups

Template for an overall assessment of the publications of listed members at the research groups

The research groups have been invited to submit one publication per member listed in the evaluation. The publication could be a scientific article or a book chapter. For monographs and other publications exceeding 30 pages, the main ideas and findings of the publication should be indicated. The selected chapter(s) should not exceed 50 pages. The panel will consider when external referees are needed for further assessment of the publications.

The assessors should review all the submitted publications in terms of their quality, and provide a single assessment for all of the publications submitted by the research group, following the template underneath. The assessment should be written with the assumption that parts of the text can be used for the section with the title “Research production and scientific quality”.

Please provide an overall assessment using the grading scale for scientific quality (5-1), as well as a short reasoning for the grade.

Note that not all of the questions involve a quality criterion (for instance, to what extent are the publications interdisciplinary or co-authored does not imply a normative judgement), these criteria are proposed to link the assessment of publications to the overall assessment of the research group aims, scope and strategies.

How would you assess the selected publication outlets, i. e. significance and quality of journals and other venues for publications.
How would you assess the scientific quality of the publications in terms of coherence of argument, methodology and overall analysis?
How would you assess the empirical contributions of the publications?
How would you assess the analytical and/or theoretical contributions of the publications?
<i>If relevant:</i> To what extent do the publications contribute to interdisciplinary research?
How would you assess the originality of the publications within its field, nationally/internationally?
<i>If relevant:</i> To what extent do the publications include co-authoring with significant researchers on the field, nationally and internationally?
How would you assess overall coherence of the research group publication output, that is, the level of shared thematic, theoretical and/or methodological foci in the group? To what extent do the publications reflect the stated thematic, theoretical and/or methodological foci of the research group?
Overall evaluation of the quality of publication output (reasoning and assessment scale for scientific quality)



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