



Assessment of Academic Research and its Consequences - Denmark

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Assessment of academic research and its consequences – Denmark

I. The assessment of individual research and its purpose

1. Does assessment of individual research take place in your country?

Individual research – that is, the research of individual researchers – is assessed in three situations:

- When academic staff are appointed or promoted
- When academic theses are evaluated
- When collective research environments are evaluated.

Since in the latter case the individual research is assessed in a collective context, the assessment of research environments will not be described further here.

Appointment and promotion

Researchers who are considered for appointment or promotion are assessed in the same way.

According to 29(3) of the University Act (Consolidation Act no. 652 of 24 June 2012 as amended by Act no. 1372 of 18 December 2012), the Minister of Science, Innovation and Higher Education can regulate the employment of academic staff and teachers. The Minister has done so through Ministerial Order no. 242 of 13 March 2012,

according to which the University can set out rules for the assessment of applicants for academic positions. According to 4(2) of the Ministerial Order, the academic assessment is to determine whether applicants possess qualifications regarding research, teaching, communication, etc., that meet the requirements of the job structure and job posting.

According to article 7 of the Ministerial Order, the rector may offer an applicant a position at the level of professor or associate professor without posting a vacancy announcement if the academic assessment shows that the applicant is clearly better qualified than others who might be considered after an ordinary job posting. In such cases a so-called search committee is usually appointed for the task of searching the market for candidates for a position at the level of professor or associate professor.

Furthermore, article 8 of the Ministerial Order states that if foundations, councils or non-governmental funding bodies provide at least half of the funds available for the appointment of a person designated by the funding donors, the rector may employ the person in question without advertising the job, but only after a positive academic assessment.

The requirements for the level of research in the case of appointment/promotion are detailed in the job description in the job structure circular (circular no. 9427 of 13 June 2007 concerning the job structure for academic staff at universities). The job structure at Danish universities is broadly divided into four levels. Teaching jobs and specific job categories are omitted below.

The qualification requirement in the job structure circular is inserted after each job category:

1. Positions under the level of assistant professor:
 - a. PhD fellows: Master's degree
 - b. Academic assistants: Master's degree
2. Positions at the level of assistant professor:
 - a. Assistant professor: PhD level. According to article 11 of the PhD Ministerial Order, the PhD thesis must document the author's ability to use the subject area's academic methods and conduct research that meets the international standards for PhD degrees in the field.
 - b. Postdoc: Same requirements as assistant professors; see 2.a. above.
 - c. Researcher: Same requirements as assistant professors; see 2.a. above.
3. Positions at the level of associate professor:
 - a. Associate professor: research-related qualifications at the level that can be achieved on the basis of a satisfactorily completed employment period as assistant professor/researcher/postdoc (however, they can also be achieved otherwise than through such employment). Applicants are required to have received supervision, developed their educational skills and received a positive written assessment of their teaching qualifications. Other qualification requirements may also be laid out prior to appointment, e.g. in relation to knowledge and technology transfer, patenting and cooperation with external parties.
 - b. Senior researcher: the same requirements as associate professors; see 3.a. above.
4. Positions at the level of professor:
 - a. Professor: assessed on the qualifications specified in the job posting (however, the applicant must be able to

document a high level of original academic production at an international level). The applicant must be able to document that he or she has furthered research in the field. Further, the assessment must place emphasis on the applicant's ability to manage research activity and perform other management functions, e.g. in connection with the university's external collaborations. Other qualification requirements may also be laid out prior to appointment, e.g. in relation to knowledge and technology transfer, patenting and cooperation with external parties.

- b. Professor with special responsibilities (fixed-term for up to eight years): as a rule, the same requirements as professors; see 4.a. above. However, emphasis must be placed on whether the applicant has the potential to further research in the field and can document original research production at an international level. Special emphasis must also be put on assessing the applicant's potential for carrying out the specific task(s) required by the specific post. In practice, fewer demands are made on professors with special responsibilities than on ordinary professors.

The usual career path in Denmark begins with a PhD programme, which may be associated with employment at the university or simply an enrolment (without salary) at the university.

The first assessment takes place when it is decided whether the researcher is to be enrolled and possibly whether he or she is to be awarded a scholarship (salary). An assessment committee is appointed to carry out the assessment. The PhD programme is completed when the PhD thesis has been submitted and assessed.

After this, the researcher will be able to apply for an advertised assistant professor or postdoctoral position in open competition with others, after which another academic job assessment takes place. Researchers may be employed as assistant professors or postdocs for varying periods of time (see below), but after approximately three to four years of employment in positions at assistant professor level, the researcher will be expected to have qualified for an associate professorship.

There is a possibility of permanent employment as an assistant professor, with an assessment at the transition to an associate professor post without re-application, but this recruitment method is very rarely used in practice. In practice, most assistant professors/postdocs need to apply for a position as associate professor in open competition with others and undergo a third job assessment.

The advancement from associate professor to professor takes place on the basis of a vacancy announcement for a professorship which the researcher can apply for in open competition with others. Universities may choose to advertise the position with a view to creating a tenured position for a given researcher who is expected to have qualified him- or herself to become a professor. However, a professorship may also be advertised simply to attract the best-qualified applicants from Denmark or abroad. The professor assessment is the fourth academic job assessment.

In the Danish system, any advancement from PhD to assistant professor, from assistant professor to associate professor and from associate professor to professor takes place on the basis of applying for the vacancy in competition with everyone else. There is no

guarantee of advancement, since in all cases universities must hire the best candidate for the job, regardless of whether the applicant is internal or external.

In theory, then, the academic researcher's career path is very uncertain, since the first permanent post is the position of associate professor, which is not a tenured position. Employment as a PhD student is limited to a period of three years. Employment as assistant professor or postdoc is usually limited to three or four years (five years for clinical positions), but may be extended for up to eight years (though no more than six years at the same university). Professorships are permanent; however, positions as professor with special responsibilities are fixed-term posts lasting up to eight years.

In practice, relatively few PhDs are hired as assistant professors or postdocs. The vast majority of assistant professors or postdocs gain employment as associate professors, but only a limited number of these become professors.

All academic job assessments require the appointment of an expert assessment committee to assess the applicants' qualifications.

Assessment of academic theses:

PhD programmes are completed by submitting a PhD thesis. As mentioned above, the research-related quality requirements for PhD theses are described in article 11 of the Ministerial Order on PhD programmes, which states that the PhD thesis must demonstrate the author's ability to apply the field's research methods and conduct research that meets the international standards for PhD degrees within the field.

Doctoral theses (which are usually but not always written while the researcher is employed as an associate professor) are regulated by Ministerial Order no. 750 of 14 August 1996. The doctoral degree is awarded on the basis of a thesis that is defended at an oral, public thesis defence. The doctoral degree is awarded in recognition of the fact that the author has considerable academic insight and maturity and has brought the field a significant step forward with his or her doctoral thesis.

The doctoral thesis has existed in Denmark for much longer than the PhD thesis. Formerly the doctoral thesis was an informal prerequisite for being deemed qualified to work as a professor at certain Danish universities, but this is no longer the case. As a result, the number of theses submitted for the doctorate in law has decreased considerably in recent years.

In practice, in the social sciences, considerably higher demands are placed on the doctoral thesis than on the PhD thesis. In the natural and health sciences, the reverse is often true.

As a general rule, a full professorship usually requires four academic job assessments and at least one thesis assessment.

2. How much significance is given to the thesis compared to other assessment elements (lectures, participation in the faculty's governing bodies, etc.)?

As a general rule, research and teaching qualifications should carry the same weight in assessments. However, apart from enrolment/appointment as a PhD scholarship student, research qualifications weigh very heavily in assistant professor, associate professor and professor assessments. The weighting cannot be

specified precisely, but it is probably not misleading to say that research qualifications count for 2/3 in the overall assessment. Teaching, along with communication and similar skills and qualifications, count for approximately 1/3, or in any case significantly less than research qualifications. There is, then, a clear discrepancy between the formal requirement for a balance between research and teaching in the assessment and the importance that these qualifications are given in practice.

PhD scholarship students are expected to have research potential rather than actual research qualifications. For this reason the PhD project's research potential, etc., is considered very significant when enrolling/appointing PhD scholarship students, although the applicant's academic background (particularly their undergraduate and graduate marks) naturally also weighs heavily in the assessment.

3. What is covered in the research assessment? How relevant is the publication of research results? What types of publication are given most importance (e.g. publication of books, publication in journals)? Does the journal ranking matter? Is it a requirement that it is ranked? Publication in national vs. international journals? Is submission to peer review relevant? How relevant is it?

Books, especially monographs, have traditionally played a major role as proof of academic qualifications. Formerly, the path to a professorship entailed writing a monograph in the form of a PhD thesis, followed by a more substantial monograph in the form of a doctoral thesis. In some cases, to qualify for a professorship it was sufficient to obtain a doctoral degree on the basis of a monograph. This is still possible, but since the doctoral thesis is no longer an informal prerequisite for obtaining a professorship, the trend has

moved towards publication of (international) articles, combined with the publication of books (often including collaborative works).

However, PhD theses usually still take the form of monographs, although it is possible to obtain a PhD based on article collections. It is to be expected that more PhD theses will consist of article collections in future, including in the field of jurisprudence.

Appointment as an assistant professor, and more so as an associate professor or professor, increasingly requires an international research profile in the form of international publications. In fact a growing number of researchers are publishing internationally. The so-called BRI (bibliometric research indicator) model, described in section II below, rewards universities for this trend.

3.1 How relevant is researchers' participation in or planning of national and international conferences?

Participation in and planning of conferences play a minor role in academic job assessments in Denmark.

3.2 Is more weight given to researchers' participation in national as opposed to international conferences/research?

Although participation in or planning of conferences do not weigh heavily in assessments, international conferences are given more weight than national conferences.

4. How many assessment levels are there, and how often does assessment occur?

See the answer to question 1 above.

5. What is the purpose of the assessment, and what are its consequences?

As mentioned above under 1, the purpose of the academic job assessments is to assess whether the applicants are qualified for the position in question, and to give the rector/dean/head of department a basis on which to decide whom to appoint.

The consequence of a negative assessment is that the researcher cannot be appointed to the position.

Thesis assessments are designed to ensure that the thesis meets the requirements for academic quality that have been set out for PhD and doctoral theses.

Negative assessments of PhD theses

There are two stages in the assessment of a PhD thesis: the assessment committee's preliminary and written recommendation, and the oral defence.

If the committee's preliminary assessment is negative, the committee must indicate whether the PhD thesis may be resubmitted in a revised form and if so when. If the preliminary recommendation is negative, the author and the primary supervisor are given two weeks to submit a comment on the assessment. If the thesis is not suitable for defence after the committee's preliminary assessment, the head of the graduate school must make at least one of the following decisions based on the preliminary assessment and any comments from the author and primary supervisor:

1. The defence will not take place.

2. The PhD thesis may be resubmitted in a revised form within at least three months. If the thesis is resubmitted it is assessed by the same assessment committee unless special circumstances apply.
3. The PhD thesis is to be assessed by a new assessment committee.

In most cases the student will be given the opportunity to resubmit an improved thesis within a certain period of time.

Formally speaking, the assessment committee can reject the thesis after the oral defence, but in practice this almost never happens.

A rejected PhD thesis cannot be resubmitted for assessment.

Negative assessments of doctoral theses

The Ministerial Order on doctoral degrees sets out the rules that apply in case of negative assessments of submitted theses. The assessment committee first provides a written recommendation as to whether the thesis should be accepted for a doctoral defence or whether it should be rejected.

If the recommendation – or one of the recommendations in the case of a divided recommendation – is that the thesis should be rejected, the author must be informed that he or she may, within three weeks, submit a written comment on the thesis or withdraw it from further assessment. If a comment is submitted to the assessment committee and the thesis is not withdrawn, the comment is sent to the committee for consideration and possible revision of the assessment. The author is informed of the committee's response to his or her objections.

The recommendation is then sent to the faculty's Academic Council, which votes on whether or not to adopt the recommendation. A unanimous recommendation from the assessment committee that the thesis be accepted for defence is adopted if at least 2/3 of the voting members vote in favour. A unanimous recommendation from the assessment committee that the thesis not be accepted for defence can be adopted by a simple majority of the voting members. A majority recommendation from the assessment committee that the thesis be accepted for defence can be adopted by a simple majority of the voting members. A majority recommendation that the thesis not be accepted for defence is adopted if at least 2/3 of the voting members vote for the recommendation.

A rejected doctoral thesis may not be resubmitted for assessment for the doctoral degree, but it may be submitted for assessment for a PhD degree.

6. What are the criteria and how are they weighted in the final assessment?

See answer to question 1 above.

7. Are there objective criteria to be followed in the assessment combined with a margin of discretion?

There is an allowance for a considerable degree of discretion in the assessment of both job applicants and theses. The specific qualification requirements are described above. Some of these are objective, such as the requirement that the applicant have a Master's or PhD degree.

The assessment of the individual researcher's academic level and potential is made by the assessment committee. In this context the committee members' own academic backgrounds and traditions will be of great importance.

In the natural and health sciences, the citation index plays a significant role, and in practice the recruitment assessments in these areas are therefore more objective than the assessments in the social sciences and humanities.

8. What is your opinion on the assessment criteria and their application to specific situations?

Assessments in connection with applications for vacancies and submission of theses are based on a long tradition of peer review which is widely recognised among researchers. The assessment committees usually spend a good deal of time on writing the assessments, which are usually comprehensive and of high quality. In practice, the system therefore works well and in most cases is a guarantee that the academic requirements for positions and theses are maintained.

However, since the assessments are discretionary, in practice the composition of the assessment committees is very important. In the absence of objective criteria, the committee members' subjective assessment will carry great weight. Thus it sometimes happens that a committee praises, for example, a PhD thesis, whereas a subsequent committee appointed to carry out a recruitment assessment strongly criticises the thesis. But in most cases the committees agree.

Given that the assessments are subjective and are of great importance, most committees take great care to make detailed and

well-reasoned judgments. In practice, committees are given between three months (assistant professor or postdoc) and eight months (thesis assessments) to formulate their assessments. This means that a number of applicants for positions will be hired elsewhere before the assessment is over and will therefore withdraw their applications.

9. Do the assessments take place in respect of research in universities or in research centres or both?

Both; cf. answer to question 1 above.

10. Are the criteria national? Do they cover both state-run and private universities?

The criteria for assessing academic job applications and theses are national and apply to all state universities in Denmark.

The criteria do not apply to private universities, but since there are currently no private universities in Denmark, this is irrelevant in practice.

11. Who is in charge of the assessments?

As mentioned above under question 1, the assessment is carried out by an assessment committee.

The rules for appointing committees to assess applicants for positions are essentially formulated by the universities themselves. As a general rule, committees deciding on applications to the main positions (assistant professor, associate professor and professor) and assessing permanent assistant professors' promotion to associate professorships should be composed of three to five members. As

regards appointments to all other posts, the university may decide whether the assessment should be made by an assessment committee or one or more experts.

As a general rule, the assessment committee must include a majority of external members, i.e. most of the committee members must be from outside the university – preferably from abroad. However, the university may waive this requirement if special circumstances of an academic nature apply.

In practice, the committees usually consist of one internal chairperson and two external members.

The expert committee's assessment is followed by an interview with the hiring authority (the rector, dean or head of department). Only applicants who have received a positive assessment may be invited to this interview. Applicants who have received a negative assessment cannot be considered for employment.

The rector, dean or head of department is not bound by a ranking of the positive assessments. The hiring authority can conduct his or her own weighting of the group of applicants who are positively assessed and hire the applicant who is considered most suitable based on an overall assessment, even if the committee has deemed other candidates more qualified.

As regards assessments of PhD theses, the legislation states that the assessment committee must consist of three members. The members must be recognised researchers within the field in question. Two of the members must be external – i.e. not from the university in which the thesis was written – and at least one of these must be from abroad, unless this is inappropriate from an academic standpoint. The

PhD student's supervisors may not be on the assessment committee, but the primary supervisor is appointed to the committee without voting rights.

To assess a doctoral thesis, the university must appoint an assessment committee, which must consist of two or three members who are experts in the thesis subject area and who are either professors or possess academic insight at an equivalent level. There is no requirement for external members or members from abroad., but in practice the committees usually consist of one internal member (who functions as chair) and two external members.

12. Is each assessment made by a different committee?

A new assessment committee is appointed for each assessment of a round of job applications or a submitted thesis; cf. section 11 above. Therefore the expert assessments are usually made by different committees.

Over time some assessors may take part in different assessment committees because they are appointed several times.

13.

Who appoints the assessment committees?

It is a legal requirement that committees assessing applicants for academic positions be appointed by the rector or dean on the recommendation of the faculty's Academic Council. The rector or dean is not bound by the council's recommendations, but in practice usually follow them.

The rules for appointing committees to assess theses are set out by the individual university. In some cases, the committees are appointed solely by a department head, dean or rector. In other cases they are appointed on the recommendation of a department council, a PhD committee or the Academic Council.

II. Assessment of research centres, universities and their units (schools)

14. Are research centres, universities and their units (schools) assessed?

Research

All universities' research is measured annually using the bibliometric research indicator (BFI), which forms the basis for the distribution of a small amount of public funding for universities.

Every year since 2009, the Ministry of Science, Innovation and Higher Education has published the so-called research barometer, which compares Danish research with international research based on a number of parameters. The Ministry also occasionally publishes reports focusing on specific areas of research and the individual universities' performance in those areas.

Universities may have local rules for the assessment of parts of the universities or academic environments. In all cases, these are local rules laid down by the university. The rules may vary within the same university or faculty.

As regards applications for external funding for research units, there will usually be an assessment of the research environment that is

applying for funding. The specific rules are set out by the authority or fund that allocates the external financing.

Education

The universities' study programmes must be accredited by a professional, independent and Danish accreditation authority within the state administration called the Accreditation Council (ACE); cf. the Act on the Accreditation Agency for Higher Education (Act no. 294 of 27 March 2007).

According to 5(1) of the Accreditation Act, Bachelor programmes and Master's programmes, as well as Master's programmes under a continuing education scheme or part-time programmes offered in Denmark under the University Act must be accredited by the Accreditation Council. To the extent that Danish universities may offer study programmes corresponding to the programmes abroad mentioned in 5(1), such study programmes must be accredited by the Council or quality-assured according to the national quality-assurance system in the country in which the programme is offered; cf. 5(2) of the Accreditation Act.

The accreditation of study programmes follows the same guidelines regardless of whether the programme is offered by different universities in collaboration, a university as a whole, or a unit within the university (faculty, department, school, etc.).

Accreditation means that the programmes' quality and relevance are documented and approved according to the European Standards and Guidelines for Higher Education (ESG).

If a programme is not accredited, it cannot be offered under the University Act and cannot obtain the government subsidies that make

the education free for students. It must instead be run in the private sector with full user tuition fees.

15. Are there public and national criteria, and do they apply to both state-run and private universities?

As a rule, the official name 'university' or its equivalent in other languages as well as abbreviations thereof may only be used as a business emblem and for equivalent purposes in connection with educational and university activities by universities governed by the University Act, and by institutions which have been granted the right to do so by other legislation; cf. 33a(1) the University Act. Special rules apply to foreign universities, cf. 33a(2).

The accreditation of study programmes and the bibliometric research indicator are only used in relation to universities governed by the University Act. All these universities are state-run.

The rules do not apply to private universities, which do not receive government grants for research or education. There are currently no private universities in Denmark.

16. Are there objective criteria to be followed in the assessment, combined with a margin of discretion?

The bibliometric research indicator

The bibliometric research indicator is a mathematical model based on objective, quantifiable data.

The calculation does not leave room for discretionary assessment, but in practice it has happened that the result of the calculation has been changed by mutual agreement.

Accreditation of study programmes

Assessment in connection with the accreditation of study programmes is carried out in accordance with the provisions of Ministerial Order no. 1402 of 14 December 2009 on the criteria for the relevance and quality of university study programmes and on procedures for approval of university study programmes.

The Order sets out a number of criteria that must be met before a study programme can be accredited. The criteria are mostly qualitative, requiring a discretionary assessment of whether they have been met. However, some are objective and verifiable without discretionary assessment.

17. What are those criteria and how are they weighted in the final assessment?

The bibliometric research indicator (BRI)

The bibliometric research indicator is based on the so-called authority lists of series (conference series, book series and journals) and publishers. The lists are prepared and audited annually by 67 expert groups consisting of a total of approximately 350 researchers. The universities appoint the researchers to the expert groups jointly, so that each group includes a representative from each university.

The following academic publications are included in the BRI: articles, contributions to anthologies, monographs, doctoral theses and patents.

The expert groups ensure that all series and lists that are relevant to the researchers are included in the authority list. The groups divide the series and publishers into two levels: a normal level (1) and a

high level (2). Other researchers in the same fields have the opportunity to propose new series or publishers for the lists every year.

The criteria for inclusion in the authority list are that the publication follows formal academic standards and that a peer review is routinely carried out before publication.

All series and lists are initially included at level 1. The expert group then chooses which to raise to level 2. Level 2 includes series and publishers that:

- are widely perceived as the leaders within their field and that publish the most significant international research
- collectively publish about one-fifth of their field's academic publications worldwide.

The main purpose of the level 1 category is to provide an incentive to increase academic output, while the main purpose of level 2 is to provide an incentive to publish in the top international journals. Thus the authority lists are attempts to increase both the quantity and quality of research.

The first of the two criteria entails that the series or publisher must be internationally recognised. This does not mean that they must necessarily be foreign or publish in foreign languages. Some national, Danish-language journals have also been included in Level 2.

All publications are awarded points depending on the type and level of publication; see the table below:

Publication type	Level 1	Level 2
Monographs (by publishers or in book series)	5	8
Articles in independent books by publishers (anthologies)	0,5	2
Article in series (journals, conferences, book series)	1	3
Doctoral theses (not divided into levels)	5	
Patents (not divided into levels)	1	

If the publication is written by authors from more than one institution the points are distributed between the institutions according to their share of the publication's writers. Then each institution's point tally is multiplied by 1.25. This is intended to encourage more research collaboration between institutions.

The total score is calculated within four overall academic fields each year:

- Humanities
- Social science
- Natural sciences and technology
- Health sciences

The BRI cannot redistribute research funds between the four areas, as each area is allocated a certain amount each year under the provisions of the government budget, for which they compete.

Both the point score and the number of publications are published annually on the website of the Ministry Science, Innovation and Higher Education.

Accreditation of study programmes

To be accredited, a study programme must meet three main criteria:

- there must be a need for the study programme in the labour market
- it must be research-based
- it must have a high academic profile and level and internal quality assurance.

The criteria are specified in Ministerial Order no. 1402 of 14 December 2009.

The first criterion entails, among other things, that the institution must account for the programme's vocational orientation, identify employers of future graduates, account for the likely demand for the programme, and describe the labour market situation for graduates of related programmes.

However, if the programme already existed when the Accreditation Council was established, the institution only needs to document that it is in constant dialogue with employers to ensure the continued relevance and quality of the study programme as well as appropriate employment for graduates.

The second criterion requires that the institution demonstrate that the programme is based on research and is linked to an active research environment of high quality, that it is organised by active

researchers, and that the students are largely taught by active researchers.

The third criterion requires that there is an interrelation between the programme's learning-outcome targets, admission requirements, means of testing, name and title.

The programmes are also required to provide instruction in a pedagogical and qualified manner, provide appropriate physical settings and give the students the opportunity to become part of an international study environment. Finally, the programme must continuously be quality-assured by the institution in accordance with the European standards and guidelines for universities' internal quality assurance of study programmes.

18. What is your opinion of the assessment criteria and their application to specific situations?

Bibliometric research indicator (BRI)

The BRI was introduced in Denmark in 2009. The system is new and the following conclusions are based on limited experience with it.

The system has been subject to considerable criticism. In particular, staff from social sciences and humanities faculties have argued that it measures in terms of quantity rather than quality. There is a perception among researchers that the division into two levels does not accurately reflect the subjects' traditions, that books and theses are given too little weight, and that the system can be 'abused' by aiming for points rather than scientific quality.

There is more acceptance of the division into levels among the natural-science, engineering and health-science communities, which

are also more accepting of the fact that publications at level 2 get more points. The principal criticism from these groups is that the system needs a third, higher level for selected journals (e.g. Nature and Science) and that a citation index is much better-suited to evaluate the quality of research.

An assessment carried out in 2011 showed that the BRI had little or no effect on publication patterns in Denmark. The indicator has had most influence in the humanities and social sciences, where previously there was a tendency to see all publication channels as being on an equal level. Following the introduction of the BRI, more researchers are seeking to have their work published in level 2 journals or books.

In the natural sciences, technology and health sciences, the indicator has had hardly any influence, since other international bibliometric data sources, especially the citation index, are used on a daily basis by the researchers.

Overall, it can be concluded that the BRI has so far helped focus attention on the traditions of research, challenge them and create greater transparency as regards institutions' publications and publication channels. These are the system's benefits.

However, there is still a risk that the system will influence the nature of the research being undertaken, or that it will be misused.

Accreditation of study programmes

The rules for the accreditation of study programmes, and particularly their administration, have been widely criticised by universities. There is a consensus that accreditation is necessary, but universities consider the work involved far too extensive and time-consuming. It

is further argued that the process may slow down the establishment of new programmes in a situation of international competition, and that the rules focus too much on quality control and too little on quality development.

As a result of this criticism, a bill has been proposed to shift the focus of the accreditation process from the individual study programmes to the institutions themselves. The new system would place requirements on the institutions for better control of quality assurance by the management, more systematic monitoring and documentation of the quality of teaching, and so on. Instead of focusing on the quality of the individual programme, the accreditation process must ensure that the institutions' own quality-assurance systems meet the European standards. The institutions will still be obliged to meet the overall objectives and documentation requirements, but will be given the freedom to define how to do so themselves.

Overall, it can therefore be concluded that accreditation is accepted as necessary for the institutions to document that they meet the requirements for the quality and social relevance of the study programmes, but that the system is too bureaucratic, costly and reactionary.

19. Who is in charge of the assessment?

The bibliometric research indicator (BFI)

The Accreditation Council, which falls under the Ministry of Science, Innovation and Higher Education.

Accreditation of study programmes

The Accreditation Council, established by Act no. 294 of 27 March 2007 on the Accreditation Council for Higher Education, whose activities are independent by law.

20. Are there various bodies in charge of the assessment?

Yes; see the answer to question 19 above and the answer to question 21 below.

21. Who makes up the assessment committees (internal vs. external committees)?

The bibliometric research indicator (BRI)

As mentioned above, the assessment of books and magazines, etc. is carried out by 67 expert groups, consisting of a total of approximately 350 researchers jointly appointed by the universities.

The technical calculation of the BRI is carried out by administrative staff in the Danish Agency for Science, Technology and Innovation, which falls under the Ministry of Science, Innovation and Higher Education.

Accreditation of study programmes

The Accreditation Council consists of a chair and eight non-executive members. The Minister of Science, Technology and Innovation appoints the chair after consultation with the Minister of Education and the Minister of Culture. The minister also appoints three non-executive members to the council. The other five non-executive members are appointed by the Minister of Science, Technology and Innovation as follows:

- two members on the recommendation of the Minister of Education
- one member on the recommendation of the Minister of Culture
- one member on the recommendation of the student representatives on the boards of educational institutions.

22. *How often do the assessments take place?*

The bibliometric research indicator (BFI)

Annually, in connection with the adoption of the government's Budget which distributes public research funding to universities.

Accreditation of study programmes

When new programmes are established, they must be accredited before they can be offered to students and receive public funding. A positive accreditation is valid for the duration of the prescribed period of study plus two years.

The first accreditation of existing programmes takes place according to a plan set out by the Accreditation Council. This accreditation is valid for a period of time decided by the Accreditation Council. This period is usually six years.

23. *What are the consequences of the assessments?*

The bibliometric research indicator (BFI)

The BRI redistributes public research grants between institutions in Denmark. A poor result therefore results in a reduction of public funding. So far redistribution has been limited.

Accreditation of study programmes

A positive accreditation means that the programmes can be offered by the institution as part of its educational activities and obtain public funding so that the programme is free for students.

A conditional positive accreditation means that the programme must be accredited again within a short period of time, typically two years.

A negative accreditation means that the programme cannot be offered to students – or only by a privately funded institution. In practice, this means that the programme must be discontinued.

In practice, approximately 85% of the programmes that are subject to accreditation have been given a positive accreditation.