DAMVAD

December 21, 2012

A desk study of aims, instruments and grants under NABIIT

Evaluation of the strategic research programme NABIIT - Report no. 1

For information on obtaining additional copies, permission
to reprint or translate this work, and all other correspondence,
please contact:

DAMVAD A/S
Badstuestræde 20
DK-1209 Copenhagen K
Tel. +45 3315 7554
info@damvad.com
damvad.com

Copyright 2012 DAMVAD

Content

1   Introduction and key findings

This report presents the results of a desk study on aims, instruments and grants of the strategic research programme "Interdisciplinary Use of Nanotechnology, Biotechnology and Information and Communication Technology" (NABIIT).

The findings of the desk study yield vital insights into both the activities funded by the programme and the aims against which these activities must be evaluated, by:

- Clarifying the rationale for the establishment of the programme
- Identifying the goals and objectives for NABIIT
- Presenting an overview of the instruments used and the grants provided by NABIIT.

This report is structured as follows:

- **Chapter 2, *Contribution to the evaluation of NABIIT*,** explains how this desk study contributes to the overall evaluation of NABIIT.
- **Chapter 3, *On strategic research and the NABIIT programme*,** presents key background information on the Council for Strategic Research and the NABIIT programme.
- **Chapter 4, *Instruments and calls*,** describes how the NABIIT goals were translated in the use of instruments and calls for applications.
- **Chapter 5, *Grants*,** presents an overview of the activities supported by NABIIT.
- The report concludes with a short discussion of the ***methodology*** behind the desk study.

Data and method

• A review of background documents on strategic research and on the NABIIT programme

• An analysis of calls for applications

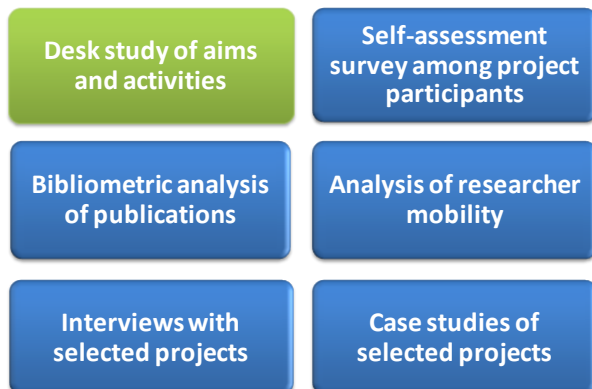• An analysis of the portfolio of 36 projects funded

Key findings

• The political rationale for the NABIIT programme was an expectation that interdisciplinarity within the three technologies would lead to future technological breakthroughs and applications that could help address societal challenges.

• The Programme Commission behind NABIIT has placed particular emphasis on researcher education (through PhD and post.doc. positions) and co-funding from participants from the private or public sectors (in an attempt to ensure their commitment and active involvement).

• An analysis of calls for applications under the NABIIT programme reveals relatively minor changes to the requirements of applications and the criteria used to assess them. Several of the changes that have occurred reflect the overall development of goals and evaluation criteria of the Council for Strategic Research rather than changes in the administration of the NABIIT programme.

• The total amount of funds granted by NABIIT has remained relatively stable during the programme period; however, both the average size of grants and the total amount of co-financing provided by participants has increased substantially over time. In large part this is due to the introduction of two new instruments in the latter two years: alliances and centres.

• In total, NABIIT has supported 36 projects: 32 strategic research projects, 2 strategic research alliances and 2 strategic research centres. Only 19 of these 36 projects were completed at the time of evaluation.

• A total of 158 organisations have participated in the 36 projects supported by NABIIT; 97 of these organisations were university departments or centres. The majority of the remaining participants are companies or authorised technological services institutes (GTS).

2 Contribution to the evaluation of NABIIT

The desk study is one of six studies undertaken in connection with the evaluation of the NABIIT programme (cf. figure 2.1).

**Figure 2.1. NABIIT evaluation methodology**

Desk study of aims and activities	Self-assessment survey among project participants
Bibliometric analysis of publications	Analysis of researcher mobility
Interviews with selected projects	Case studies of selected projects

DAMVAD 2012

The evaluation is carried out on behalf of the Danish Council for Strategic Research by an independent, international peer review panel, assisted by the consultancy firm DAMVAD.

The evaluation of NABIIT is based on the evaluation design illustrated in figure 2.2. The desk study sheds light on the following evaluation elements, which are also highlighted in green in figure 2.2:

- *Policy rationale for NABIIT and overall goals for strategic research:* The overriding political motivations for the establishment of NABIIT and goals for strategic research that the programme is expected to contribute to.

- *Objectives of NABIIT:* The strategic and operational objectives of NABIIT against which its results must be evaluated.

- *Design and implementation:* Organisation of the programme, e.g. as reflected in the use of policy instruments and in the criteria and focus areas described in calls for applications.

- *Inputs:* The resources that have been invested in supported projects, including NABIIT grants.

Figure 2.2. Contribution of the desk study to the evaluation design
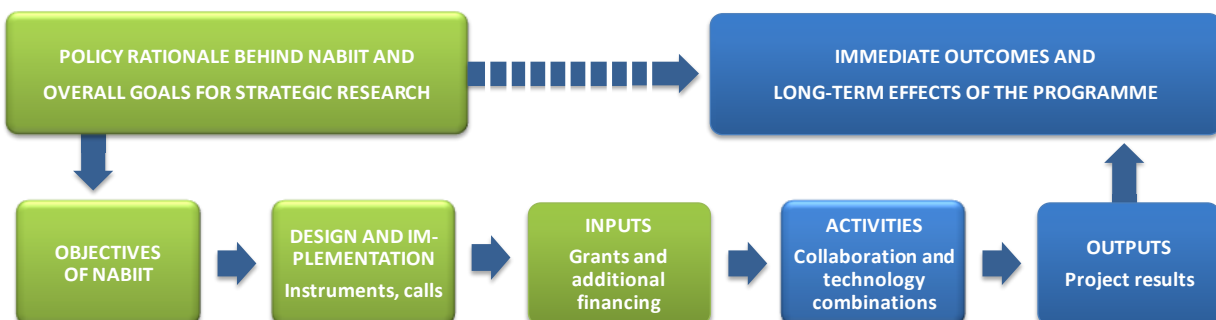
DAMVAD 2012

3   On strategic research and the NABIIT programme

3.1   About the Council for Strategic Research

The Council for Strategic Research was established in 2004 based on an amendment of the act on the Danish research advisory system. Among other things, the amendment entailed a separation of the Danish research council into two councils: *The Council for Independent Research*, which supports researcher-initiated research within all scientific areas, and *the Council for Strategic Research*, which supports research reflecting national priorities determined by the Danish Parliament.

Strategic research funding is thus restricted to priority areas, which are defined by the Parliament. The Parliament also allocates funding to these areas, which is then managed by the Council with the aim of supporting research that seeks to overcome significant societal challenges and hence strengthen future growth, prosperity and welfare.

The Council consists of a Board and a limited number of programme commissions. The programme commissions are appointed for one year at a time to administer research programmes that are developed based on the Danish government's annual budget. The programme commissions consist of acknowledged researchers mainly from Denmark and the other Nordic countries. They are vested with the funding-allocation authority within the research areas determined by the Board, and within the overall principles for strategic research funding established by the Board.[1]

> **Box 3.1. Programme commissions (as of 2012)**
>
> • Health, Food and Welfare
> • Sustainable Energy and Environment
> • Strategic Growth Technologies
> • Individuals, Disease and Society
> • Transport and Infrastructure
> • Education and Creativity
> • Peace and Conflict

The Council allocates funds and assesses the performance of research activities on the basis of three equivalent criteria for strategic research quality: relevance, potential impact and quality of the research.

In addition, the Council seeks co-funding from project participants from both the public and private sector in order to secure their commitment to the projects.

Today, the Council operates with a two-step application process: in the first phase, short project descriptions form the basis for an initial screening of applications; in the second phase, selected projects provide detailed grant applications, which are assessed in a peer review procedure by internationally recognised researchers before the programme commissions make the final grant decisions. The aim of this two-phased procedure is to minimise the workload and resources needed to apply for strategic research grants. During the NABIIT programme period, however, all projects were granted in a one-phase process.

---

[1] See *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012).

3.2 Overall goals for strategic research

The Council has a number of strategic priorities, which among other include promoting public-private collaboration, interdisciplinary research, involvement of users, international collaboration and funding large scale projects. Key overall goals for strategic research are summarised in box 3.2.

A key aim of the Council is to support the education of researchers.

The Council pays 44% of total overhead costs at Danish governmental research institutions and universities in connection with funded projects.

Box 3.2. Overall goals of strategic research

- To advance research of high international standing
- To promote increased interaction between public and private research
- To promote interdisciplinary research initiatives
- To support the internationalisation of Danish research
- To contribute to postgraduate education and researcher training
- To contribute to a strengthening of research environments in Denmark

Source: Terms of reference for the evaluation of NABIIT.

For a full description of the priorities and goals of the Council for Strategic Research, see *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012).

3.3 Previous analyses of strategic research

Prior to this evaluation of the NABIIT programme there have been no systematic evaluations of activities or results under the NABIIT programme in particular or the Programme Commission for Strategic Growth Technologies in general.

However, since the establishment of the Council for Strategic Research in 2004, two analyses of strategic research in general (i.e. covering a broad range of programmes and programme commissions) have been undertaken. Key findings from these studies are presented in box 3.3-3.4, as they offer insights into strategic research in general against which the results of the evaluation of NABIIT may be compared.

Box 3.3. *Impact Assessment of Strategic Research* **(The Danish Council for Strategic Research 2008, in Danish)**

This impact assessment, undertaken by DAMVAD, was based on surveys of and interviews with public and private sector participants in 64 strategic research projects. Key findings were:

• Participating in strategic research projects creates significant so-called "additionality effects" for participants from both the public and private sector, as they gain access to new knowledge that can further their R&D activities and help contribute to more effective research management in these organizations. Results indicate that these effects could become even stronger if collaboration among project participants and research management were to be strengthened.

• The researchers that participate in strategic research have a strong performance compared to other Danish researchers.

• Research institutions are the main catalysts in the strategic research projects, but the projects are heavily oriented towards collaboration with private or public sector enterprises.

• Strategic research projects are focused on the development of research based knowledge that may ultimately lead to such projects. Moreover, projects are often closely connected to participants' existing, ongoing R&D activities.

Box 3.4. *Interdisciplinarity in Strategic Research* **(The Danish Council for Strategic Research 2009, in Danish)**

This report describes the results of an analysis, undertaken by DAMVAD, of interdisciplinarity in 100 strategic research projects. Key findings from the analysis, which was based on surveys, interviews and bibliometric analysis, were:

• More than two thirds of strategic research projects are interdisciplinary. However, there are different forms and degrees of interdisciplinary research. Collaboration among closely related disciplines (e.g. within the technical sciences) is far more common than collaboration among for instance technical science and social science.

• Interdisciplinary research is a means to an end, not an end in itself. The research problem must determine which disciplines are involved (and not the other way around) to ensure that interdisciplinary collaboration is fruitful (and not just symbolic).

• Effective interdisciplinary research, however, demands strong research management. Moreover, interdisciplinary research often involves higher uncertainty as to work processes and outcomes and may requires participants to invest significant time and resources in building a common "language" and developing joint or at least compatible research methods.

• Some elements of interdisciplinarity may be advantageous in PhD programmes, but it is important to ensure that PhDs develop strong competences and networks within an established (often disciplinary) research community and a good academic track record that will enable them to find academic employment.

• While interdisciplinary research can, in some fields, be more difficult to publish in high-impact journals, it can also provide academic researchers with new, broader publication opportunities.

In addition, in October 2011, TNS Gallup undertook a survey[2] among grant holders and company participants in strategic research projects that had been completed by mid-2011. Among other things, it showed that projects included both basic and applied research.

The TNS Gallup survey also showed that strategic research programs have a significant degree of interdisciplinarity, which contributed to the development of new methods and theories, better insight into a given research problem, and research results with greater application potential.

The key effects experienced by private sector participants in the projects were the development of new R&D competences and knowledge and valuable inputs toward the development of innovations. However, the firms have yet to realise economic benefits from the strategic research collaborations.

Moreover, the TNS Gallup survey indicated that strategic research projects lead to both better and long-term collaboration between research environments and users of research from the public and private sector, and to increased international networks, collaboration and funding applications for the academic participants.

3.4   About the NABIIT programme

The political rationale for the NABIIT programme was an expectation that interdisciplinary research on nanotechnology, biotechnology and information and communication technology will lead to future technological breakthroughs and applications that can help address major societal challenges within for example health, environment and energy.

Box 3.5. Main objective of the NABIIT programme

To identify and develop future opportunities for commercial innovation and solutions to societal problems through combinations of nanotechnology, biotechnology and ICT

The programme was hence established with the purpose to identify and develop future opportunities for commercial innovation and solutions to societal problems through combinations of nanotechnology, biotechnology and ICT.

The NABIIT programme was managed and administered by the Programme Commission on Strategic Growth Technologies (hereafter referred to as "the Commission"). Like the rest of the Council, the programme commission prioritises the education of young researchers.

The Commission has also placed a particularly high emphasis on securing co-funding from private sector participants. This is based on the idea that partners who provide significant co-funding are more likely to be committed to the project and to participate actively both its design and completion.

Projects are subject to evaluation, usually in the form of an interim evaluations (consisting of scientific reports and meetings 1-2 times during the funding period depending on project size) and a final scientific report and a final meeting. The interim evaluations may lead to modifications to the project, but will only in very rare cases lead to a termination of the grant.

---

[2] The results of the survey are not available in a report, but figures presenting the results of the survey have been provided for this desk study.

4 Instruments and calls

4.1 Instruments

Three instruments have been used in the NABIIT programme: strategic research centres, strategic research alliances[3] and strategic research projects[4].

Key characteristics and requirements of these instruments, as they are used by the Council for Strategic Research today, are described in boxes 4.1-4.3. For more detailed information on the use and requirements of these instruments, please see *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012).

32 out of the 36 projects supported by NABIIT were strategic research project. Emphasis in this desk study is therefore placed on projects. It should also be noted that that use of instruments has changed during the NABIIT programme period; these changes are described in section 4.2.

---

ish Council for Strategic Research 2012)

Box 4.2. Strategic research centres

• Employed where there is a need for research environments of a high scientific standard with a keen focus on developing solutions to complex problems

• The interdisciplinary approach is expected to build innovation and entrepreneurial potentials

• Requirements for intensive and binding collaboration with (and significant co-financing from) relevant public and private sector participants and strong international research environments.

• Research management must be given high priority

• The centre is expected to develop into an internationally leading research environment and to continue its collaborative activities with public, private and international partners when funding ceases

• Duration and scale: 5-7 years; eligible for upwards of DKK 30 million in Council funding

Source: *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012)

Box 4.1. Strategic research projects

• Are expected to find solutions to a relatively restricted set of research issues

• Are expected to include involvement of public and private sector stakeholders and collaboration with international researchers and research environments

• Projects must promote research institutions' and the public and private sector parties' development of interdisciplinary expertise and contribute to innovation among stakeholders in the public and private sectors

• Are required to create a basis for subsequent international strongholds

• Duration and scale: 3-5 years; eligible for upwards of DKK 10 million in Council funding

Source: *Strategic research – Principles and Instruments* (The Dan-

Box 4.3. Strategic research alliances

• Used when there is a need to create alliances between scattered, small-scale research environments in Denmark and relevant public, private and international actors to find solutions to a key challenge

• Should facilitate consolidation of expertise within more powerful research communities that can then be boosted further through collaboration with strong, international research environments and joint utilisation of the research facilities at the parties' disposal

• Must ensure that the parties to the alliance pursue its principal objectives and that the research activities are undertaken in a genuine collaboration

• Duration and scale: 5 years; around 15-20 million in funding for research (and networking activities)

Source: *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012)

---

[3] Strategic research alliances were formerly known as "strategic research networks".
[4] Strategic research projects were formerly known simply as "projects" and as "minor strategic research initiatives."

4.2 Calls for applications

This part of the desk study presents an analysis of the calls for applications under NABIIT to shed light on how the goals for the programme (and changes in the overall goals for strategic research) have been translated and communicated to potential applicants.

The presentation of the calls for applications has changed somewhat during the NABIIT programme period (i.e. from 2005 to 2008). In the following, we describe significant changes in the topics and focus areas in NABIIT calls during the programme period.

Instruments. The instruments used in the NABIIT programme have evolved during the programme period, as evident from table 4.1.

In 2005, it was only possible to apply for funding for strategic research *projects* with a grant frame of up to DKK 7 million[5] and a duration of up to 4 years.

From 2006 onwards, it was also possible to apply for strategic research *alliances*, then known as strategic research *networks*. This instrument had a grant frame of DKK 15 million (more recently up to 20 million) and a duration of up to 5 years.

Table 4.1. Instruments included in NABIIT calls

Instruments	2005	2006	2007	2008
Projects	X	X	X	X
Alliances (previously networks)		X	X	X
Centres				X

DAMVAD 2012 based on NABIIT calls 2005-2008

Strategic research *centres* were introduced in 2008. Centres have, as described in the previous section, a duration of up to 5 years and are eligible for up to DKK 5 million a year in strategic research funding.

Focus areas. Emphasis in the calls has changed somewhat during the programme period. Some issues have been consistently and explicitly addressed, including requirements:

- That research should be interdisciplinary
- That technologies should be used to identify and develop future opportunities for commercial innovation or solutions to societal challenges
- Close collaboration between research institutions, companies and other stakeholders.

In the first calls in 2005, there was particular emphasis on promoting collaboration among Danish research environments.

Key focus areas that were given increased attention in later calls included the promotion of:

- Research quality of international standing
- International collaboration, including with the new growth countries
- The broad dissemination of research results.

The development in the focus areas explicitly addressed in calls under the NABIIT programme reflect, to a significant extent, the overall development in the criteria for strategic research. These criteria are presented in their most recent form in *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012), but existed in earlier versions from the year 2006 onwards.

---

[5] The maximum grant frame for strategic research projects was subsequently raised to allow for larger projects.

4.3 Assessment criteria

The calls for applications also indicate the criteria considered in the evaluation of applications.

An analysis of these criteria reveals that most of the criteria remained the same throughout the programme period, including:

- The societal and commercial relevance of the project
- The managerial and/or scientific qualifications of principal applicant and key team members
- Contribution to research training (i.e. PhD and post.doc. positions)
- Feasibility of the proposed research activities
- Quality of interaction between public and private sector (i.e. related to synergies and co-financing from participants).

Criteria that were given more weight from 2006 onwards include

- The international dimension of the proposed activities
- The strategic significance of the proposed activities for the participating companies.
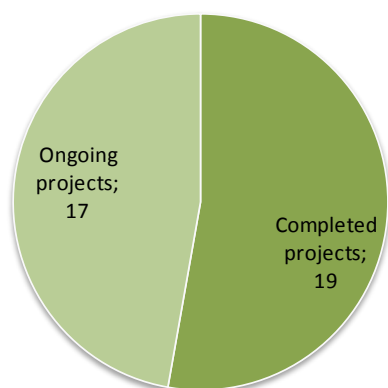
5   Grants

5.1   Number of grants

A total of 36 projects have been supported by NABIIT during the programme period 2005 to 2008.[6]

As of June 1, 2012, 19 of the 36 projects have been completed. A project is considered completed when the final report has been approved by the programme commission.

The majority of the ongoing projects are expected to be completed in by 2012.

Figure 5.1. Completed and ongoing projects

Ongoing projects; 17

Completed projects; 19

DAMVAD 2012 based on data from the Council for Strategic Research

5.2   Use of instruments and size of grants

Funding has been provided for two strategic research centres, two strategic research networks and 32 strategic research projects. Where specific instruments are not specified, in this report, the term "project" is used to refer to all 36 research activities that have received funding from NABIIT.

Table 5.1 shows the distribution of these grants by the research institution that the grant holder was affiliated with at the time of application.

Table 5.1. Grants, by type of instrument and by affiliation of grant holder (at the time of application)

	Alliances	Centres	Projects	Total
University of Copenhagen	1	2	7	**10**
Technical University (DTU)*	1		10	**11**
University of Aarhus**			10	**10**
Roskilde University			2	**2**
IT University of Copenhagen			2	**2**
Southern Danish University			1	**1**
Total	**2**	**2**	**32**	**36**

DAMVAD 2012 based on data from the Council for Strategic Research
* Includes the national research laboratory RISØ, which merged with the Technical University of Denmark in 2007
** Includes the national research laboratory Dansk Jordbrugsforskning, which merged with the University of Aarhus in 2007

---

[6] The evaluation of the NABIIT programme includes grants awarded in 2005 under the Strategic Programme for Nanoscience and Nanotechnology.

The size of grants and the number of grants distributed under NABIIT can be seen in tables 5.2 and 5.3, respectively. The average size of NABIIT grants was 8.8 million.

Table 5.2. Grant size (minimum, maximum, average and total), by instrument (in million DKK)

	Min.	Max.	Ave.	Total
Centres	27.5	28.0	27.7	**55.5**
Alliances	9.2	15.0	12.1	**24.2**
Projects	3.4	11.9	7.4	**238.1**
Total	**3.4**	**28.0**	**8.8**	**317.8**

DAMVAD 2012 based on data from the Council for Strategic Research

Table 5.3. Number of grants, by year and instrument

|	2005	2006	2007	2008	Total
Centres				2	2
Alliances			2		2
Projects	7	14	7	4	32
Total	**7**	**14**	**9**	**6**	**36**

DAMVAD 2012 based on data from the Council for Strategic Research

The next two figures describe changes in NABIIT grants. Figure 5.2 shows that the total amount of funds granted by NABIIT has remained relatively stable during the programme period and notably in the latter three years.

Figure 5.3, however, indicates substantial differences from year to year in the minimum and maximum size of grants and in the average grant. These differences are in large part due to (1) the establishment of two strategic research networks in 2007 (awarded DKK 9.2 and 15 million in Council funding) and two strategic research centres in 2008 (awarded DKK 27.5 and 28 million).

Figure 5.2. Total NABIIT grants, by year (in million DKK)
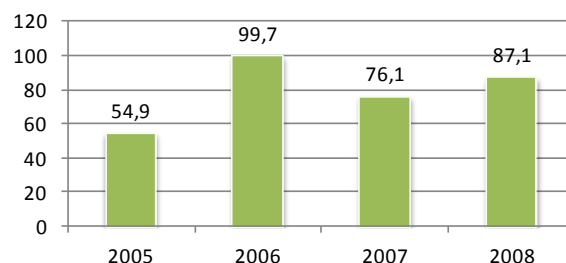
DAMVAD 2012 based on data from the Council for Strategic Research
N = 36 grants

Figure 5.3. Size range and average size of NABIIT grants, by year (in million DKK)
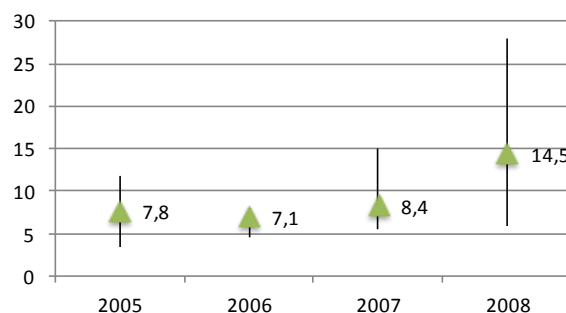
DAMVAD 2012 based on data from the Council for Strategic Research
N = 36 grants

Meanwhile, table 5.4 shows the average size of grants in each year compared to the average size of co-financing per grant awarded in that year. This figure shows that the provision of co-financing has remained relatively stable over the evaluation period, save for a decrease in 2007 and a substantial increase in 2008. The latter is explained by the fact that funding was granted in 2008 for two large strategic research centres, which also involved considerable co-financing from participants.

Table 5.4. Average grant size and average size of co-financing per grant (by year and in total, at the time of application, in million DKK)

	2005	2006	2007	2008	Total
Ave. grant size *	7.9	7.1	8.4	14.5	8
Ave. size of co-financing **	7.3	6.5	4.9	11.7	7.1

DAMVAD 2012, N = 36 grants

* Based on data from the Council for Strategic Research

** In current prices. Source: Ministry of Science, Innovation and Higher Education, "Terms of reference for evaluation of the strategic research theme Interdisciplinary Use of Nanotechnology, Biotechnology and Information and Communication Technology (NABIIT)" , 26 January 2012.

5.3   Participants

In total, 158 organisations have participated in the 36 projects funded by NABIIT. Projects have between 2 and 9 participating organisations[7]. On average, 4 organisations participate in each project.

The four main types of participating organisations are:

• University departments or centres
• Companies (and industry organisations)
• Authorised technological services institutes (in Danish, "GTS")
• Hospitals.

Figure 5.5 shows the number of participants from each organisation type. 97 out of the 158 participating organisations stem from universities.

Of the 36 projects, 28 have company participants and another 6 include a GTS (which a particular type of company). Just two projects have no company participants.

Figure 5.5. Total number of organisations participating in NABIIT projects, by type of organisation

DAMVAD 2012 based on data from the Council for Strategic Research

---

[7] These numbers are based on the original applications; as such, there may have been subsequent changes to some of the projects that are not reflected here.
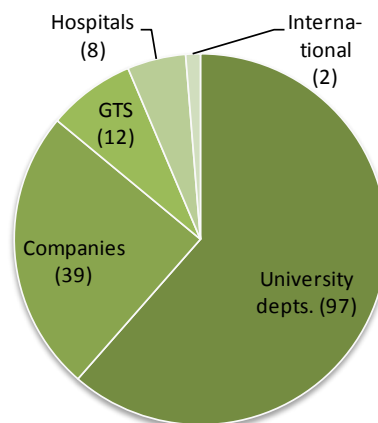
6 Methodology

6.1 Purpose

The purpose of the desk study was to gather and synthesise key information about aims, instruments and grants under NABIIT. The findings of the desk study thus yield insights into both the activities funded by the programme and the aims against which these activities must be evaluated.

The desk study consisted of three main elements:
- A review of background documents
- An analysis of calls for applications
- An analysis of the project portfolio.

6.2 Data

The study was based on the following materials:
- **Background documents** on strategic research, on the Council for Strategic Research and the NABIIT programme (see box 6.1).
- **Calls for applications** for NABIIT (2005, 2006, 2007 and 2008; cf. box 6.1).
- **NABIIT project portfolio and data on grants** provided by the Council for Strategic Research (Excel documents including project specific records i.e. information on participants, grant size, year of grant, project completion etc.).

Box 6.1. Calls for applications included in the analysis of calls under NABIIT

The analysis is based only on calls for those programmes and themes that are part of the evaluation of the NABIIT programme, and therefore excluded several programmes and themes mentioned in joint calls. The following calls were analysed:

2005. Calls for the Strategic Programme on the Interdisciplinary Application of Nanotechnology, Biotechnology and IT and Communications Technology, and Calls for the Strategic Programme for Nanoscience and Nanotechnology.

2006. Calls for the Strategic Research Programme for Interdisciplinary Applications of Nanotechnology, Biotechnology, IT and Communications Technology

2007 and 2008. Calls for Theme 1: Interdisciplinary Use of Nanotechnology, Bio-technology and Information and Communication Technology

6.3   Method

The desk study was based on a systematic analysis and synthesis of the materials listed in section 6.2. Moreover, the desk study was guided by:

- A focus on evaluation themes and questions, as described in *Evaluation of NABIIT: Evaluation Methodology*
- Emphasis on changes over time (e.g. significant changes in calls)
- Inputs from the Council for Strategic Research.

Box 6.2. Background documents analysed in the desk study

• *Strategic research – Principles and Instruments* (The Danish Council for Strategic Research 2012)
http://en.fi.dk/publications/2012/copy_of_strategic-research-principles-and-instruments-1-january-2012

• *Annual report 2011-2012* (The Danish Council for Strategic Research 2012)
http://en.fi.dk/publications/2012/annual-report-2011-2012-english-edition-pdf/aarskrift-ENKELTSIDET_UK-WEB.pdf

• Background brief provided by the Council for Strategic Research

• PowerPoint presentations by the Council for Strategic Research and the Programme Commission for Strategic Growth Technologies (presented at the first meeting of the NABIIT evaluation panel held in Copenhagen on April 18, 2012)

• *Impact Assessment of Strategic Research / Effektmåling af strategisk forskning* (The Danish Council for Strategic Research 2008, in Danish)
http://www.fi.dk/publikationer/2008/effektmaaling-af-strategisk-forskning/

• *Interdisciplinarity in Strategic Research / Tværfaglighed i strategisk forskning* (The Danish Council for Strategic Research 2009, in Danish)
http://www.fi.dk/publikationer/2009/tvaerfaglighed-i-strategisk-forskning

• Powerpoint presentations presenting key results and conclusions from a TNS Gallup survey conducted in October 2011 among grant holders and company participants in strategic research projects that had been completed by mid-2011

• Council for Strategic Research website
http://en.fi.dk/councils-commissions/the-danish-council-for-strategic-research