

Organization, Funding and Evaluation of Scientific Research in The Netherlands*

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More than half of all research in The Netherlands is carried out by the business enterprise sector. This sector, as well as a small sector of non-profit institutes, will not be considered here. Only a short discussion of the sectors, which are second and third in size, will be presented. These are formed by the fourteen universities and by a large number (110) of public research institutes.

In 2007 the total funding of these two sectors amounted to about € 4000 M, shared in a ratio 2:1 in favour of the universities.

Roughly € 200 M is donated to international organizations like CERN and ESA. This is 2% of the GNP, and therefore does not meet the Barcelona-norm of 3%, which at the Lisbon EU-meeting in 2000 was agreed to be the minimal contribution to R&D.

1 Universities

1.1 Organization and Funding

Traditionally the university is a collection of faculties which form the basis of research and education. Each faculty consists of a number of departments which are again subdivided in smaller units. The board of the university is appointed by the Minister of Education. It has overruling power over the (elected) council of the university which only plays an advisory role.

In more recent years a trend is seen in which interdisciplinary institutes, (top) research institutes, and graduate schools are formed. Eventually the whole subdivision of the faculty will probably be based on the existing special institutes for education and research.

The university receives financial support from several sources, called "geld-stromen", i.e. moneyflows:

1st flow: On average two thirds directly from the government (~ € 1549 M).

2nd flow: From NWO, one of the large technological institutes, to be mentioned later. The money from this second flow is intended for special research projects (€ 289 M).

3rd flow: Money from contracts with third parties for research projects (€ 616 M).

The numbers give the size of the corresponding flows in 2005.

1.2 Evaluation

A new Standard Evaluation Protocol [3] (24 pages of fine print) has been developed, which aims at two objectives regarding the evaluation of research:

1. Improving the quality and productivity of research, investigating the relevance for the society and determining the feasibility thereof;
2. Accountability to the board of the research organization, and to funding agencies, government and society at large.

With these objectives in mind a visiting committee will investigate each institute and afterwards write a comprehensive, but concise, report about its quality, culminating in a grade ranging from 1 to 5 (that stands, respectively, for unsatisfactory, satisfactory, good, very good and excellent). In practice, only grades 4 and 5 are awarded.

Each institute is also supposed to write a self-evaluation report which contains a "SWOT" – analysis of its Strengths, Weaknesses, Opportunities and Threats to the environment. People should answer questions like: What advantages do you have compared to other research groups? What kind of activities should you avoid? What is the competition in your area doing better? And many more.

It is easy to imagine that a Polish physicist, when confronted with this kind of questions, would strongly be reminded of the suppressive regime of the past.

2 Public Research Institutes

The main organizations consisting of this kind of institutes are:

2.1 NWO

The Netherlands Organization for Scientific Research which funds research at universities and at its own nine research institutes:

- ASTRON – Institute for Astronomical Research;
- CWI – Centre for Mathematics and Computer Science;
- ING – Institute for Dutch History;
- NIOZ – Royal Netherlands Institute for Sea Research;
- NSCR – Netherlands Institute for the Study of Crime and Law Enforcement;
- SRON – Netherlands Institute for Space Research.

FOM – Organization for Fundamental Research of Matter includes three institutes:

- AMOLF – Institute for Atomic and Molecular Physics;
- Institute for Plasma Physics Rijnhuizen;
- NIKHEF – Institute for Subatomic Physics.

2.2 KNAW

The Royal Netherlands Academy of Arts and Sciences spends the largest part of its budget on its 17 institutes in the field of the humanities, social sciences, life sciences and "science and technology assessment". In addition to 11 institutes in the humanities and social sciences and the Rathenau Institute for the assessment

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* Almost all information in this note has been taken from two publications of the Rathenau Institute [1], [2].