

Danish Science Policy

The Danish Government's ambition is that Denmark should be among the most attractive countries in the world to live and work in - and Denmark should be the world's most competitive society by 2015.

The Danish Government published a globalisation strategy in April 2006, containing 350 specific initiatives, which together entail extensive reforms of education and training programmes as well as research and entrepreneurship, and also substantial improvements in the framework conditions for growth and innovation in all areas of society. Its main goals are securing Denmark a strong competitive strength in the globalised market economy as well as a strong social coherence.

Some of the key initiatives in the strategy are:

MORE COMPETITION AND BETTER QUALITY IN PUBLIC SECTOR RESEARCH – KEY INITIATIVES:

More funds for public sector research

Publicly-financed expenditure on research and development should reach 1 per cent of gross domestic product (GDP) in 2010.

50 per cent of research funds should be subject to competition

The proportion of public sector research funds that are distributed in competition should constitute 50 percent of the total research funding available in 2010.

New model for competition between universities

Today, virtually all research funds that are distributed according to an open competitive process are awarded to individual researchers and research groups. As a consequence, research risks becoming dispersed and disconnected from the universities' strategy for their research. Therefore, a proportion of the funds available in the future should be allocated in competition between universities. Each university's management should be required to take part in a competitive bidding process in which they submit proposals for large-scale, long-term research projects. The proposals should be evaluated on the basis of their quality and relevance.

The research grants should cover all costs

The rules for research grants allocated on a competitive basis should be revised, so that the grants cover the full costs of the institutions.

Greater number of large, long-term research grants

The grant award procedures of The Danish Council for Strategic Research and The Danish Councils for Independent Research should be revised, with the aim of increasing the proportion of large, long-term research grants.

Research grant pool for research infrastructure

A long-term Danish strategy for investments and priorities of major research infrastructures should be formulated. A special research grant pool is earmarked in the State Budget for the purpose of financing investments in cross-cutting research infrastructures that are so large they cannot be borne alone by the particular university or research institution.

More funding towards strategic research

A larger proportion of the public sector research funds that are awarded in open competition should be targeted at strategic research conducted within areas that can act as a driving force for increasing prosperity or remedy important social problems.

Future funding awarded towards strategic research should include to a greater extent requirements regarding private sector co-financing.

Better basis for prioritising

The basis for the political prioritisation of strategic research should be strengthened. Therefore, a broad-based survey should be regularly carried out to identify the research needs that societal and business developments create as well as the capabilities of Danish research institutions to meet these needs. Once every four years, a catalogue should be compiled of themes for strategic research.

Quality barometer and evaluation of large-scale programmes

The quality of Danish research should be measured and evaluated in a systematic way. A “quality barometer” should be established that gives a picture of how the quality of Danish research is developing. Furthermore, research programmes should be more systematically evaluated in an effort to ensure that research grants are allocated according to quality-based criteria.

Co-financing of Danish participation in international research cooperation

In recent years, the EU has considerably widened the strategic cooperation on research. However, Danish participation in the EU framework programmes is declining. The rules should be amended so the research councils can allocate funding support towards international research cooperation. In addition, the research councils should have the opportunity to use funds for national co-financing in order to promote Danish participation in EU framework programmes and other international research activities.

GOOD FRAME WORK CONDITIONS FOR COMPANIES’ RESEARCH, DEVELOPMENT AND INNOVATION – KEY INITIATIVES:

Greater number of highly educated people

More people should obtain a higher education qualification. And the number of PhD scholarships and industrial PhD programmes should be doubled. Government research institutions should be integrated in universities, in order for this part of research to play a role in educating master's graduates. And universities should offer more continuing education programmes for highly educated people.

Funds for cooperation to be collected in a single grant pool

In order to strengthen collaboration on research and innovation between companies and the research and academic community, the funds for current collaboration schemes are to be gathered in a single grant pool. The pool is to contain, among other things, "open" funds, which are to be allocated to projects that do not fall under the category of already known forms of collaboration. Within the framework of the pool's "targeted" funds for collaboration, three new initiatives are to be established: 1) a discount scheme is to be set up for small and medium-sized enterprises, 2) contributions by small enterprises to co-financed research projects are to be doubled up, and 3) matchmakers are to strengthen collaboration between companies and research institutions.

Better prioritisation of funding for innovation incubators

The grants allocated to innovation incubators should be prioritised towards incubators that have the basis for achieving the best results. Heavier demands should be placed on the competences of the innovation incubators. The aim is to build a structure in which competences are gathered in stronger incubators than today.

Funds for Authorised Technological Service Institutes (GTS) are to be allocated on an open competitive basis

Authorised Technological Service Institutes (GTS) provide consultancy as well as research and development services to Danish companies on new technology. In order to make the GTS system more dynamic, more actors should be invited to submit bids for providing technological service. Technological service should be made more flexible, so that it can be adapted to the market's need for new knowledge and technology. For example, an eBusiness innovation centre should be established within the framework of the GTS system. The results produced by GTS Institutes should be evaluated internationally.

Private companies should have better opportunities to participate in public-financed research

Research-intensive Danish companies should be given more opportunity to compete for public funds on the same conditions as public sector research institutions. Announcements and information about invitations to bid for research funds should be organised in a way so that companies are encouraged to participate.

Co-financing Danish participation in international research and development programmes

The Danish Council for Technology and Innovation should be able to co-finance international programmes and projects that can promote innovation in Danish companies.

User-driven innovation programme should generate new knowledge about customers and markets

Innovation should be strengthened through the more systematic production of knowledge about the needs of customers and users. An integrated research environment should be created within the field of user-driven innovation. This environment should be cross-disciplinary and incorporate areas such as business economics, anthropology, ethnology, engineering science, design and psychology. In addition, specific projects on user-driven innovation in small enterprises and in the public sector should be initiated. The projects should be selected in open competition. The projects should focus on, among other things, the systematic identification of customer and user needs as well as market trends.

Marketplace for knowledge trading

A new Internet-based marketplace for trading in rights should create a transparent and efficient market for the purchase and sale of patents, brands and other rights.