

Estonian Academy of Sciences
DEVELOPMENT PLAN
2006–2010

1. INTRODUCTION

This Development Plan lays down the directions of development for the years of 2006–2010 of the Estonian Academy of Sciences as a scientific organisation under public law, with the aim to increasing the role and responsibility of the Academy in pointing out the way for development of research and high technology innovation, in shaping the national strategy of research and development, and in promotion of international scientific co-operation with the European Union and with other countries. This document is a follow-up to the Academy Development Plan for the years 2000–2004, approved by General Assembly on 15.06.2000. Regardless of certain implementation problems, the said Plan helped to enlarge the share of research and development in Estonia and to pose this country as attributing value to global knowledge.

2. ESTONIAN ACADEMY OF SCIENCES

The generic tasks of the Estonian Academy of Sciences have been fixed by respective legal acts (Estonian Academy of Sciences Act, Organisation of Research and Development Act) and Statute of the Estonian Academy of Sciences. The Academy, as a body of highly qualified scientists, has been governed in its activity by the country's research and development strategy "Knowledge-based Estonia" approved by Riigikogu (Parliament) in December 2001; the Academy participates in working out the new edition (for the years 2007–2013) of the Estonian R&D strategy.

The Academy sets the following goals:

- To analyse the developments witnessed in Estonia and in the world, as well as the outcome of research efforts, and to attract attention to high level scientific research that cannot be overlooked in Estonia;
- To exert influence on science policy and the society, on the path to knowledge-based Estonia;
- To act in furtherance of Estonia's economic, social and cultural development and conservation of environment.

To achieve those goals, the Academy initiates, if needed, the amendments and additions to legal acts.

3. PRINCIPLES OF ACTIVITY

3.1. Vision

Underlying the knowledge-based society is the existence of a critical mass of knowledgeable people in the society required to sustain the exponential growth of knowledge, and the recognition of their activity by political forces influencing the development of society. While the exact sciences, and development works and innovation underpinned by them, are the main engines of the material well-being of the society, they do not stand in opposition to the Humanities and social sciences providing for culture, ethics and cohesion of the society.

Requirement that must be satisfied in advance for the state to make progress is that the state must acknowledge the wielding force of knowledge on politics. Globalisation of the research

will give rise to a host of problems calling for solutions by the state of Estonia, specific due to the particular character of our environment, population and former scientific work.

The objective of the activity of the Academy is to provide for co-operation between researchers and decision makers in issues, which are related to physical and intellectual milieu, the public health and sustainable development of the society. Whereas the Academy must not overlook the inter-disciplinary character of issues, the natural and anthropogenic perils, holding them in due view whenever possible and necessary, and the new developments in science. The Academy will give an active hand in moulding the national educational strategy, and it will hold out the need to build up the development of the society on science-based world outlook, basing on real, not ephemeral knowledge, doing away with populism, shallowness, subjective opinionated stances, stubbornly sticking to one's own opinions, and esotericism. A major task of the Academy is to remain a consistent and stalwart supporter of quality of the Estonian research.

By the year of 2010, the Academy will be a research organisation, whose influence and authority bases on independent and high level scientific experience. The Academy will have become a precursor, and originator of the strategy of front line science (both fundamental and applied research) in Estonia. The functions for the time being of the Academy will have been replenished by:

- Monitoring and analysis of research and development;
- Participation in organisation of grant financing of scientists;
- Participation in organisation of evaluation of Estonian research activity;
- Assisting in development of international co-operation of Estonian scientists.

3.2. Action plan

The Academy will emphasise its role in showing the way to front line science (fundamental and applied research) and formation of its strategy. Nevertheless, the activity of the Academy in that direction is sapped by insufficiently regulated legal space and scarcity of funds. The Academy will hold important the role in synthesising sciences, as well as in generalisation and implementation of knowledge obtained from analytical research. The Academy will continue co-operation with decision making assemblies, universities, Estonian research institutions and international science organisations (European Research Council (ERC), European Science Foundation (ESF), European Federation of National Academies of Sciences and Humanities (ALLEA), International Council of Science (ICSU) etc.).

The main activity of the Academy must, in bulk, be realised through the activity of Divisions of the Academy, and it will fully observe the goals and implementation schedules of the strategy "Knowledge-based Estonia 2007–2013 (TE II)". Formation of the respective strategy is on the homestretch and the Academy is actively participating in its finalising and presentation to the legislative branch.

3.3. Tasks for the future

The Academy will focus, in particular on following problems, calling for consideration and solution in the proximate future or within the period embraced with the Development Plan:

- a) The Academy will carry on consultations with the goal to bring the Estonian Science Foundation under the "legal umbrella" of the Academy – i.e. to transform that private-law foundation into part of the public law Academy. The change being contemplated will facilitate the growth of the science foundation, linking it consistently to the increase of the state budget. This presumes sufficiently effective preliminary work and substantial changes in laws, providing to the scientific community and the lawmakers a feeling of

- security that the given undertaking is to the benefit of development of science and it will improve funding of the research.
- b) The Academy considers it expedient to take under its “legal umbrella” the system of evaluation of research, envisaged in the Organisation of Research and Development Act.
 - c) The activity in the aforementioned areas, as well as elaboration of concrete development plans and strategies dictates the need to set up a Survey and Foresight Group at the Academy. The results of the activity of that working group can also be used by Estonian Research and Development Council, for planning its activities and decisions, enabling formulation of the shorter and longer term tactics and strategy of Estonian research and development. The working group is expected to evolve into a vital mediator between institutions of Estonia and those of the European Union, as well as international science organisations. The working group can only be formed, however provided the Academy is respectively financed and suitable personnel is found and carefully trained.
 - d) The Academy deems it necessary to set up, in its composition, a research structure composed of highly qualified researchers, with their positions funded for a fixed term – Institute of Advanced Studies, embracing Research Professors and researchers elected by the Academy in the process of contest for a fixed term, first of all in areas, where Estonia has sufficiently high scientific excellence, and where the future leaders of the scientific domains could work for 3–5 years. The Academy views the increase of the number of Research Professors and researchers elected by the Academy under contest for a fixed term an important stimulus for development of Estonian research. Research Professors and researchers elected by the Academy would continue work in suitable working groups in Estonia or abroad and their activity would be funded complementarily. The Academy will scrutinize the legal acts regulating the given area, with the purpose of making propositions to the Ministry of Education and Research and the legislative branch.
 - e) The Academy will make use of all opportunities to involve young scientists in its activity, by organising seminars for post-doctors and by finding opportunities for interdisciplinary exchange of results of researchers working in different domains, furthering co-operation of young scientists, especially in directions important for Estonia. There will be established the sub-fund of Estonian Culture Capital, for marking the achievements of young scientists. The Academy will set the goal to find, in the nearest years the opportunities to establish the terms for grants and scholarships to young scientists working successfully.
 - f) The Academy holds it important to organise meetings of Divisions and General Assemblies with research papers delivered, and hearings of scientific papers at sessions of the Board of Academy. The goal of hearing the scientific papers is mutual dissemination of information and in particular, pinpointing fuzzy areas with problems of common interest and seeking ways of solution to them, holding in mind development and co-ordination of strategy for different domains. More attention than hitherto will be paid to regularity of meetings of Divisions, while the number of sessions of General Assembly will be increased.
 - g) The Academy holds in view the need to elevate the visibility of its activity and the whole research work in the country, for that purpose continuing publication of topical issues and communicating more with the press. The Academy will attempt to assess the credibility of outcomes of research published in media, and to complement them, if necessary. The Academy considers it important to continuously publish the works of top scientists in the Academy issues, and participation of its members in putting out study literature in Estonian.

- h) The Academy will support the Estonian research institutions in carrying out international scientific conferences in Estonia, and will publish the texts of papers in the “Proceedings” of the Academy.
- i) A major goal of the activity of the Academy is to find greater output than heretofore to the areas related to population and culture in Estonia. Respectively, the Academy will participate in the programme “Science and Culture” contemplated within the strategy “Knowledge-based Estonia 2007–2013”, while keeping in mind co-operation with creative societies.
- j) Estonia’s economical development demands significant increase of the share and efficiency of research in engineering, necessitating a larger contribution from the state budget and private sector in funding that area. With reference to the results of Survey and Foresight Group, the Academy will participate in composing the prognostication on opportunities of technological development in Estonia. For the same goal, the Academy will hold special seminars for analysis of industrial research. The Academy will keep in mind, in this connection, the private law based subsidiaries (and spin-off companies) having cropped up at universities and research institutions, working groups and other researchers, and it will invite experts from foreign countries to give lectures at those seminars.
- k) It is the task of the Academy to study its history and the activity of its members, with the view to perpetuate that information and cause it to last. In 2008, the Republic of Estonia will celebrate its 90th anniversary, while the Estonian Academy of Sciences will mark its 70th jubilee. The Academy will display initiative, in order to organise jointly with universities and research institutions a conference on history of science dedicated to those events, and to issue the relevant printed matter.
- l) The Academy will systematise the existing data in the area of science policy, and create access for everybody to necessary materials.

3.4. Implementation of the action plan

For implementation of the action plan, the Board of the Academy will formulate concrete tasks, holding in view the measures and limitations stated in the “Action plan of Estonian economic growth and employment for 2005–2007 for implementation of the Lisbon strategy”, approved by the Government of the Republic on 13.10.2005.