

History, organisational features and procedures

The history

The *Fundação para a Ciência e Tecnologia* (FCT- Foundation for Science and Technology) was created in July 1997 on the basis of two ancestors from which inherited its functions, competencies, and tradition: *Junta Nacional de Investigação Científica e Tecnológica* (JNICT - the National Board for Scientific and Technological Research, 1967-1997), and The *Instituto Nacional de Investigação Científica e Tecnológica* (INIC, the Portuguese Research Council; 1929-1992).

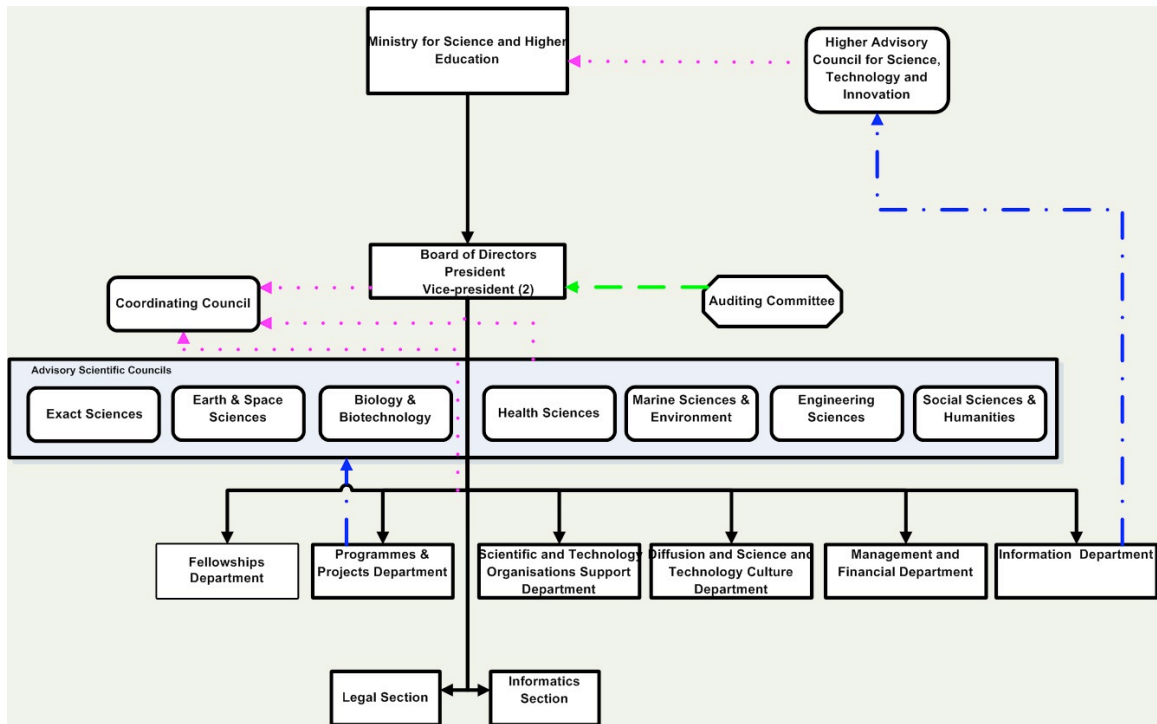
FCT inherited the funding, information, and diffusion competencies of JNICT, focused on funding the pillars of the system: human resources, research centres and the research activity. The more downstream activities and the promotion of technology development and innovation were assigned to the Innovation Agency (AdI), a specialised agency for the implementation of innovation policy, created in partnership with IAPMEI, the small and medium-size firms supporting agency from the Ministry of Industry. The other two organisations created from the split of JNICT were The *Observatório das Ciências e Tecnologias* (Observatory for Science and Technology, OCT, now OCES) inheriting the responsibility of statistics and studies production, and the the *Instituto para Cooperação Científica e Tecnológica Internacional* (Institute for International Scientific and Technological Cooperation, ICCTI, now called GRICES) which has inherited the international cooperation and is in charge of the bilateral, multilateral and European cooperation.

The positioning of FCT, organisation and legal status

Fundação para a Ciência e Tecnologia (FCT) is the Portugal's main funding agency for research with a status of a public organisation with administrative and financial autonomy, under the aegis of the Ministry of Science, Innovation and Higher Education. In 2001 FCT's budget was of around 20% of the total public research budget in the country.

FCT covers all fields of science, from natural sciences to humanities, normally in a responsive mode, aiming at capability enhancement and research excellence. Until our days this general support to the development of the system is complemented with the promotion of research in public policies domains, through thematic programmes launched in cooperation with other public organisations.

The structure of FCT is as follows:



The governing body of FCT is composed by a president and two vice-presidents appointed for a three year mandate by the minister responsible for the science and technology policy. The Board of Directors is advised by seven advisory bodies organised by large group of disciplines (we consider here the committee of natural sciences divided in two one for the Earth and Space Sciences and the other for the Biosciences). The members are nominated by the President of FCT and appointed by the Minister in charge.

The Committee mission is to advise FCT on the design and monitoring of programmes as well on the identification of funding needs of the research field. Although not directly involved in the evaluation and selection of the different instruments, the committee provides advice on the foreign experts and panel members to be appointed for the area. The committee works interlinked with the different operational divisions of FCT.

FCT accounts nowadays for around 190 staff members. The operational divisions are organised by type of activity: human resources, projects and programmes, institutional funding, and information and diffusion. There are also support services as accounting and management, legal advice and information system management. The Presidency has a small number of senior advisors for policy advice, formulation and development of new or of horizontal nature actions.

Processes and procedures

FCT funding is structured around the following schemes: promotion of training and career development (fellowships, scholarships), promotion of the institutional base in higher education and private non-profit sectors (institutional funding), support to infrastructures, promotion and development of scientific activity (research projects) and

for diffusion of scientific culture. The type of instruments mobilised within these schemes are: fellowships and scholarships (MSc, PhD, post-doc, sabbatical leave, PhD in companies); institutional funding for support of centres of excellence (associated laboratories) and research centres; grants for acquisition of equipment, awards, and research projects. The usual length for a project is three years, while the institutional funding is awarded on a three to five years basis. Duration of fellowships and scholarships is variable, according to its nature, but can go up to a six year period for a post-doc.

For the evaluation and selection of the proposals submitted for funding FCT uses a panel review process. The panels for project proposals and institutional funding are mainly composed of foreign experts, appointed by the minister and nominated by FCT following the advice of the advisory committees. Fellowships' panels are normally composed of national experts. Since the panels are not large, mail review is used for the topics not covered by the panel.

FCT do not involve in the advisory bodies stakeholders, but seeks to involve the main actors of the national innovation system, comprising scientific communities, firms, and other stakeholders as private foundations involved in scientific and technology support, in the strategic planning and cooperative activities.

Budgets and Finance

Most of these schemes are co-funded by the Operational Programme for Science and Innovation 2010 (POCI) supported by EC regional funds (55%) and by the national budget (41%) and other sources (4%). POCI is a reshuffle of POCTI, which was a six-year programme 2000-2006 with an initial budget approved of 956,736,000 euro for all scientific and technology domains. POCI accounts for an available budget of 552 M€ for all domains for the remaining two years.

The total budget of FCT in the last three years has increased from 185M€ in 2003 to 282 M€ in 2005. The relative weight of the instruments within the budget is approximately the following, varying however from year to year: human resources support 35%, research activity 30%, institutional support 16%, equipment and infrastructures 7%, and scientific culture diffusion 7.5%.

Activities and Outputs

In strategic terms, the mission of FCT is centred around defined key areas of intervention:

I. - Promotion of advanced human resources training, through the continued funding of postgraduate awards, mainly for the preparation of doctorates and post-doctoral research. Besides individual awards, FCT also provides scholarships for researchers involved in research projects and working at R&D units. This area of intervention is of crucial

importance for the country, since training and advanced qualification has been frequently highlighted as one of the main bottlenecks.

II. - Funding of scientific research and technological development projects in all scientific areas, financed by National and Community funds, as well as in strategic areas and in relation to specific themes that are of particular importance for Portuguese society. In parallel with national programmes and European structural support, FCT is increasingly involved in ensuring the integration of its programmes for the funding of projects within the European space, keeping with the concept of “open coordination” included in the Lisbon’s Strategy. This integration has been carried out in a gradual and selective manner in the coordination programmes reserved for national funding agencies, implemented both under the scope of the European Framework Programme, the ERA-NETs, and under the scope of the European Science Foundation, namely the EUROCORES. Mention should also be made to the funding of teams involved in multilateral cooperation activities, under the scope of international organisations of which Portugal is a member, such as CERN, ESO and ESA.

III. - Support for the development and management of R&D units through a funding programme based on a model whose criteria depend on the results of external assessment. This area of intervention is subject to criteria of economic, social and cultural relevance, favouring the development of a critical mass, the creation of networks, and the internationalisation of research and innovation, particularly when linked to the business world. Associate Laboratory status has been awarded to those R&D centres whose scientific development is considered excellent by international standards, showing a high performance capacity and providing support in the formulation and implementation of public policies. This area of intervention includes the modernisation of public research institutes.

IV - Support to the infrastructural development of public and semi-public organisations, through funding of equipment and large facilities. This support is driven by the aim of optimising sharing of resources and promoting networking between the organisations.

V. - Promotion of the mobility of researchers through the publicising of research opportunities with national and foreign organisations at the national mobility portal, Astrolabium. The creation of this portal is included in the European Commission’s Mobility Strategy, which seeks to give an international dimension to scientific careers and develop the mobility of researchers between the academic world and the business world.

VI. Promotion of scientific communication and culture through the funding of a series of activities aimed at promoting communication between scientists and disseminating the national scientific production: participation at scientific meetings, production of scientific periodical and non-periodical publications and funding of scientific societies. The fundamental aim of the promotion of scientific culture is to make the public aware of the importance of scientific and technological research for economic, social and cultural development. FCT is also associated with different scientific prizes that recognise the value and merit of the work undertaken by researchers and help to make this known to the general public.

FCT strategic responsibility is to ensure the achievement of the objectives of the national policy for Science, Technology and Innovation, in keeping with a perspective that includes consolidation, growth, sustainability and the international affirmation of the skills and capacities of the Portuguese scientific and technological community.

In 2005 FCT will reinforce funding with two main aims that are complementary: convergence with Europe and integration within the European Research Area. One vector will concentrate in the promotion of internal cohesion of the system through the promotion regions of knowledge, the support to thematic areas, and the reinforcement the links of knowledge production with the needs of public policies. The other vector will be devoted to the integration of the research system within the European Research Area, through the co-funding of European projects and networks awarded by the Framework programme and the support to the internationalization of the research teams and organisations.