



EUROPEAN
COMMISSION

European
Research Area

Malta

Major EU achievements in science and research

2004 > 2009



Research Policy and Initiatives

As part of the **Lisbon Strategy for Growth and Jobs**, realising the **European Research Area (ERA)** has become an integral component of the EU's response to the challenges posed by globalisation. The goal is to create a true **European Single Market for Research**, where knowledge, researchers and technology can move across frontiers in the same way as goods, people, services and capital do. This is the **Fifth Freedom**; the freedom of movement of knowledge to where it is best used and exploited.

This Fifth Freedom is indispensable if Europe is to become the world's leading **'knowledge economy'**, where knowledge will help sustain prosperity and competitiveness and address the societal challenges that concern European citizens.

By bringing together the research community, industry and policy-makers, it promotes scientific excellence and addresses the fragmentation and duplication in European research that leads to wasted resources, ground lost to our global competitors and a sub-optimal impact on economic growth and job creation.

Making the ERA come true is now a unanimously agreed objective that features high on the political agenda.

In the science and research area, **the overall achievements between 2004 and 2009** have been:

- > successfully targeting funding to where it has greatest impact on EU competitiveness and scientific excellence, through efficient implementation of a new **EU Seventh Research Framework Programme** with more funding (up to €54 billion over 7 years); and
- > putting the **ERA** project at the centre of the policy agenda through a series of initiative designed to make tangible improvements in building the freedom of movement of knowledge.

Beyond these global achievements, some particular successes are worth mentioning:

- > Establishing **the ERC (European Research Council)**, which grants EU research support, beyond the traditional collaborative transnational research project on predetermined subjects, to a more innovative, science-driven 'free' research model. The ERC has been a great success – the first call for grants, in 2007 attracted over 9,000 applications;
- > Creating effective public – private technology partnerships associating enterprises and public research organisations in key areas for industrial and technological research through several large **Joint Technology Initiatives (JTIs)**. JTIs increase the scale and impact of research investment, ensure the coordination and integration of research in Europe and raise the technology content of industrial activity. Five JTIs have been launched in areas such as innovative medicines, the hydrogen economy and nanoelectronics;

- > Taking targeted steps towards a European Research Area and the better coordination of national and EU efforts, by launching initiatives to promote **mobility of researchers, joint programming of public research, cross-border investment in large infrastructures and better exploitation of research results**. Member States have adopted a joint vision for ERA in 2020 with the right conditions for governance for research and investment in R&D. Member States will report on their progress in investing in R&D through their respective National Reform Programmes;
- > Improving the focus of **thematically-oriented European research on societal and long-term business needs** and maximising the European added value of our support; We have focussed even more intensively, through policy, innovation, organisation and funding on how we can better deal with the major societal issues, such as Alzheimer's, energy security, climate change or food security.
- > **Opening European research to the world** by adopting a resolutely international dimension, both in the implementation of the Framework Programme and in partnership with Member States. Global challenges need global cooperation and the achievements over the last five years have encompassed new scientific and technological agreements with our neighbours, both global and local.
- > **Raising the average level of research in Europe**, through specific actions promoting the **regional dimension of research** and supporting the development of **research capacities** in the enlarged EU. 26 out of the 27 Member States now have set their own research intensity targets and R&D expenditure increased with growth in real terms in all Member States. The Lisbon Strategy for growth and jobs has also resulted in a higher proportion of the **Regional Policy Funds** being earmarked for R&D and innovation. The EIB and the EC have joined forces to develop a new funding instrument for the knowledge economy: the **Risk Sharing Finance Facility**, freeing up some €10 billion for investments in research development and innovation.
- > **Rationalising and simplifying rules and practices for beneficiaries of FP7** and programme management and by using research money even better. Outsourcing of many management tasks to the **Research Executive Agency** will help the Commission to manage increasing budgets with existing human resources, while focusing more on policy development.
- > Consolidating the **Joint Research Centre**, the EU's own research centre, as a provider of robust, independent scientific and technical support for EU policies.

Malta and FP6 (2002-2006)

Framework Programmes (FP) are the EU's main method of research funding in Europe. The Sixth Framework Programme for Research (FP6), which ran between 2002 and 2006, supported about **10 million Euros of Maltese research.**

Malta was particularly successful in areas such as 'Information society technologies' (over 2.2 million Euros); '**Sustainable development, global change and ecosystems**' (over 1 million Euros); '**Aeronautics and space**' (over 1 million Euros) and '**Horizontal research activities involving SMEs**' (over 900.000 Euros).

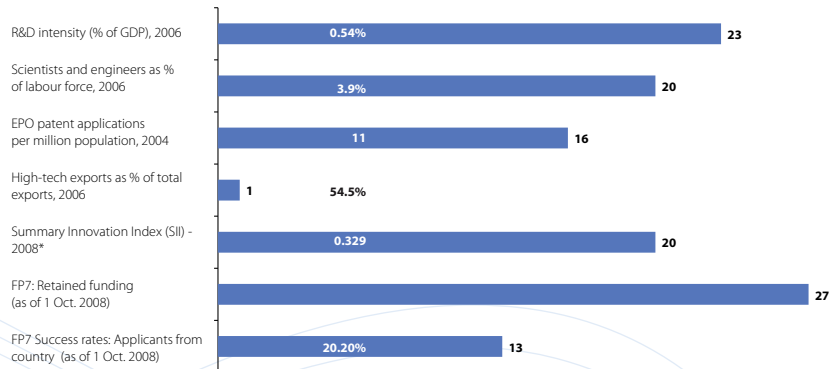
Elsewhere, Maltese research organisations were also successful in getting funding through the '**Research and innovation**' parts of the programme '**Structuring the European Research Area (ERA)**'. It aims at improving Europe's innovation performance by stimulating a better integration between research and innovation and helping turning research into useful and commercially valuable innovations. Here, Malta received over 900.000 Euros.

Maltese organisations were also active in coordinating and participating in projects under FP6. Some 126 Maltese organisations were involved in 112 projects; 7 of these were led by Maltese organisations.

(Please remember that the figures quoted are commitments, not payments)

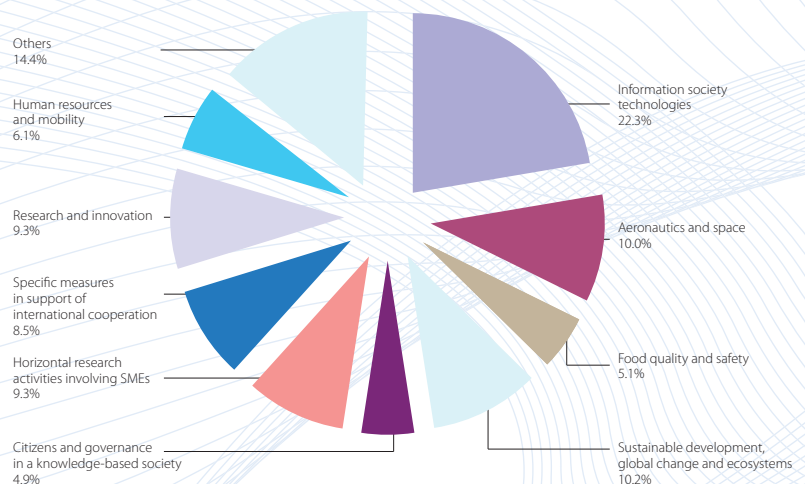
Malta: Classification in EU-27

(Legend: MT ranks 1st for high-tech exports, and 13th for FP7 Success rate within the EU-27 countries)



* The SII gives an overview of aggregate national innovation performance
Sources: Science, Technology and Competitiveness key figures report 2008/2009, European Innovation Scoreboard 2007 and DG RTD.

FP6 Signed Contracts: EC Contribution by Priority Area (as of May 2008)



Malta and FP7 (2007-2013)

The Seventh Framework Programme for research and technological development (FP7) will operate between 2007 and 2013. By October 2008, Maltese research organisations had secured EC contributions of around **1.8 million Euros** through FP7.

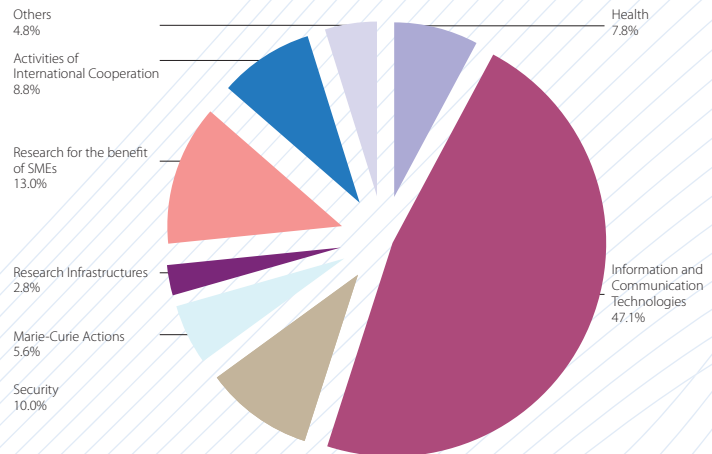
Maltese research organisations are particularly successful in the following areas of research: **'Information and Communication Technologies'** (over 850.000 Euros), **'Security'** (nearly 200.000 Euros) and **'Health'** (nearly 150.000 Euros).

Additionally, they have secured significant funding through **'Research for the benefit of SMEs'** to strengthen the **'innovation capacity'** of small and medium-sized enterprises (over 230.000 Euros) and **'Activities of International Cooperation'** (over 150.000 Euros).

The Maltese are the lead coordinators in one FP7 project and 21 Maltese organisations are involved in 21 projects.

(Please remember that the figures quoted are commitments, not payments)

FP7 Signed Grant Agreements:
EC Contribution by Priority Area (as of October 2008)



Research and innovation in the Regional Policy (2007-2013)

Regional development is essential to increase research capacity throughout the EU. Malta benefits from this kind of support for research under the **Convergence objective, co-funded by the European Regional Development Fund (ERDF)**. The operational programme **'Investing in Competitiveness for a Better Quality of Life'** will receive over 100 million Euros of EU funding for the priority **'Enhancing Knowledge and Innovation'**.

The **'European Territorial Cooperation'** objective gives significant support to research and innovation as well. Two programmes operating between Malta's cross-border regions target research and are co-funded by the European Regional Development Fund (ERDF). The **'Mediterranean Programme'** will receive over 57 million Euros to strengthen **innovation capacities**. Also, the **'Italy-Malta'** programme, which targets **'Competitiveness, innovation, research and sustainable development'**, will receive over 14 million Euros for this priority.

Malta: a key actor of European research

Maltese organisations remain actively involved in the Framework Programmes, as coordinators or participants in successful projects, for example:

- > The **HIRF-SE** (High intensity radiated field synthetic environment) project is currently investigating ways to cut the risk to aircraft of electromagnetic interference. The **Universita Ta Malta** and their partners seek to provide the aeronautics industry with a framework that can be applied during the development phase, which can effectively identify electromagnetic sources at an early stage of the design process. The project will also help simulate a widespread typology and a number of electromagnetic interference sources and provide a developed methodology and tool.
- > The general objective of the **SESAME** (Southern European Seas: Assessing and modelling ecosystem changes) project is to assess and predict changes in the Mediterranean and Black Sea ecosystems. Maltese experts and their partners are looking at regime shifts in the past to help predict future ones, taking into consideration the economic aspects of ecological changes and studying their effects on key goods and services, such as tourism and fisheries. The creation of a public platform is one of the focal points of the project.
- > The **TEL-ME-MOR** (The European Library: Modular Extensions for Mediating Online Resources) project of the 'European Library' sought to bring the digital collections of nine countries, including Malta, into the European Library through a multilingual searchable interface. In addition to increasing the sum of material available to users, the team produced several reports on the creation of a European Digital Library, the next step in the goal of centralising Europe's national library resources.
- > **Universita Ta Malta** participates in the **ResIST** (Researching Inequality through Science and Technology) project focused on whether and how science and technology are contributing to or helping to reduce inequalities today. The aim of the project is to help make explicit the linkages between S&T policies and practices and the range of distributive outcomes, and then explore the policy choices and accountability mechanisms. The challenge of the project will be to integrate its analysis into research policy in Europe and developing countries.
- > The **AMASS** (Autonomous Maritime Surveillance System) aims to reduce actual and potential illegal immigration and the trafficking of drugs, weapons and illicit substances with a surveillance system and a sophisticated data fusion process that will enable the transmission of relevant information. Malta actively contributes to this system, which will be able to observe wide critical maritime areas.

- > Two Maltese partners participate in the **SELFDOTT** (From capture based to self-sustained aquaculture and domestication of bluefin tuna) project, which proposes to implement knowledge already obtained on the artificial control of reproduction of the Atlantic bluefin tuna (BFT) to obtain viable eggs, and study embryonic and larval development for the production of fry (juveniles). Suitable and environmentally performing feeds for the growout of BFT will be developed and a protocol for the commercial-scale larval rearing of BFT will be recommended at the end of the project.
- > **Universita Ta Malta** cooperates in the **REMC** (Religious education in a multicultural society: school and home in comparative context) project, which studies the transmission of religious beliefs and values through the education system and the family across different EU country contexts. The study will contribute to the conceptualisation of religious socialisation within multicultural settings and to policy development in the educational arena by highlighting the role of religion in school choice as well as potential tensions between home and school regarding religious formation and practice.
- > The Volga, as Europe's longest river and home to one of the world's best conserved delta wetlands, is increasingly in peril due to threats from dams, reservoirs and hydropower stations. The **CABRI-VOLGA** project facilitated cooperation and coordinated research on environmental risk management. Thanks to the project partners, including the **International Ocean Institute** from Malta, the river's future looks cleaner and brighter and the project's results could also be applied to other rivers facing similar problems.
- > Malta has amongst the highest interest in innovation and yet amongst the lowest uptake of science in the EU according to Eurobarometer surveys. Therefore the Universita Ta Malta introduced the **XJENZA-TV** project—a science-TV series with the primary aim to introduce Maltese school children to science by allowing them to perform science themselves. The series shows the possibilities of a career in science and gives science a much needed make-over.
- > Malta is included in the Preparatory Phase for a pan-European Biobanking and Biomolecular Resources Research Infrastructure (**BBMRI**) that will focus on technical, legal, governance, and financial issues to prepare to construct BBMRI. The objective is to build on existing biobanks, resources and technologies, specifically complemented with innovative components and properly embedded into European scientific, ethical, legal and societal frameworks, provide the concept for a key resource to increase excellence and efficacy in biomedical sciences, drug development and public health, expand and secure competitiveness of European research and industry in a global context and develop a sustainable financial framework.

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