

# ITALY: THE SEA, THE SUN, THE SAINTS...AND THE SCIENTISTS?

## The Science & Innovation Scene – Latest Developments and Opportunities in Italy



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### BACKGROUND

As everyone knows, Italy is a beautiful country. Over the centuries, some of the most celebrated “brains” of all times were Italians: from da Vinci to Marconi. But over recent years, Italy has lagged behind more advanced European and world competitors in innovation. Longstanding weaknesses such as a lack of strategic forward planning, inefficient use of resources and the resulting brain drain have not helped.

However, even in the current climate of economic constraints, Italy has made significant strides towards improving its R&D sector and has maintained total R&D expenditure as a share of Italy's GDP (from 1.26% in 2009 to 1.25% in 2011, compared to 1.76% in the UK).

### R&D INITIATIVES

In 2012, under former Prime Minister Monti and his Research Minister Francesco Profumo, the Italian government focused on implementing a process of fiscal consolidation and reform where

innovation plays a crucial role for boosting competitiveness and long-term sustainable growth. Minister Maria Chiara Carrozza, who took over from Profumo in the new government in April 2013, is determined to continue along the same route. In meetings, she has made clear that “resources allocated to science and innovation should not be considered a cost but as

degree of integration with European R&D and Horizon 2020 priorities, and a simplification of the funding programmes.

For the first time, an evaluation exercise of Italian universities was carried out by the National Agency for the Evaluation of the University System and Research (ANVUR): ANVUR data will be used by

### ... an investment for the benefit of society ...

an investment for the benefit of society and essential in tackling emerging global challenges”.

The new government's most recent measures concentrate on a mixture of budget cuts and streamlining research funds. The overall framework is still oriented towards direct grants and loans, but there is a move to shift

some of this indirect financing towards encouraging demand-driven innovation in key research areas. Focus has been on the decline of ordinary non-competitive funds, a higher

Italy's education and research ministry to award about €540 million (£464.5 million) in 'prize funds', part of the government's 2013 university budget. The ANVUR rankings may also end up playing a part in a continuing debate on the possibility of merging some institutes to save costs.

On the public administration side, the recently created Agency for the Digital Agenda (ADA) will manage funds for large R&D projects based on ICT development and implement national digitalisation policies. Locally, regions are increasingly involved in initiatives for promoting innovative business

### ... significant strides towards improving its R&D ...

and fostering private-sector R&D investment. In addition, top-down initiatives such as 'Smart Cities', a major investment programme worth 1 billion Euros (£800 million) launched by the Ministry of Education, Universities and Research (MIUR) in 2012, are encouraging all regions towards smart innovation.

To identify best practice and opportunities for collaboration in solving technological challenges in this area, in February 2014 SIN Italy will organise a mission of UK experts to Italy.

### ... new measures have also been introduced ...

To strengthen the alliance between different R&D systems, interesting new measures have also been introduced. For example, Minister Carozza recently created the Challenge Prizes, an initiative modelled on Prime Minister David Cameron's Challenges. The outcomes will be presented at Expo 2015 in Milan and a web portal will be used to catalyse partnerships between companies, charities and universities to develop innovative solutions to issues ranging from cultural heritage conservation to waste management.

## INDUSTRIAL R&D

But how is industrial research being tackled today? Current policy mainly increases support for new R&D-oriented companies, large collaborative programmes and, more recently,

demand-driven innovation. Business R&D investment, which accounts for more than half of the total R&D investments, increased from 0.61% of GDP in 2009 to 0.67% in 2011, still behind the 1.07% of the UK. The reform of company incentives signals a move towards indirect incentives and a focus on SMEs which are at the heart of Italian industry. Despite the relatively low private R&D investment, Italy ranks second in Europe after Germany in terms of innovative SMEs. Together with UKTI, SIN Italy organises

the UK-Italy Springboard, an entrepreneurial challenge and business development opportunity for Italian high-tech, high growth start-ups. SIN Italy's award, the *GR8 Technologies*

### ... new models of collaboration ...

*Prize*, will highlight the most interesting new technologies being developed in Italy in the eight areas crucial to UK growth.

To encourage innovation through new models of collaboration between business and academia, in 2013 MIUR set aside €350M (£300M) for the creation of national thematic clusters in advanced manufacturing, green chemistry, life sciences, intelligent transport systems, agrifood, aerospace, smart communities and intelligent ambient assisted living. SIN is already exploring

opportunities for building new links with both the UK Catapults and the Knowledge Transfer Networks in some of the sectors which both countries consider key to the national economy.

### ... many international large-scale infrastructure projects ...

## ITALY AS A PARTNER

Despite the limited financial resources and the scarcity of national coordinated large scale initiatives, Italian researchers have the highest productivity in Europe, and Italy ranks fourth, after UK, Germany and France, in terms of EU funding received.

Italy is also an important partner in many international large-scale infrastructure projects and coordinates the European Multidisciplinary Seafloor and Water Column Observatory and

European Plate Observing System.

SIN Italy has identified areas of excellence and coordinated initiatives in many fields, such as a workshop in cultural heritage conservation, which resulted in a Memorandum of Understanding between AHRC and the National Research Council; or in food research, fostering the creation of two large EU projects with Institute of Food Research and

the University of Bologna as coordinators.

Besides Smart Cities, this year SIN Italy's focus will be on space, bringing to Harwell the Italian Space Agency and Italian

companies to discuss policy and future collaborations.

Things are definitely moving ahead in the right direction and the SIN Italy Team is actively working to showcase the UK approach to innovation, creating useful opportunities for cooperation and exchange, linking up with the Italian Minister and senior officials, and making sure that the right enabling environment for research is created for the next Leonardo da Vinci...

SIN Italy Team is present at the British Embassy in Rome and at the British Consulate General in Milan and fosters strategic collaboration in science and innovation between Italy and the UK in a wide range of sectors. If you would like to know more about how we can help please contact us at

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