



Experts urge Malta to invest in R&I, today!

Malta, the smallest EU Member State, has a booming economy with full employment and a solid budget surplus. Tourism, gaming as well as financial and business services are spearheading impressive growth, but how sustainable is all this? This is what the Maltese government had in mind when it asked a panel of EU Policy Support Facility (PSF) experts for advice on how to boost research and innovation (R&I) fundamentals. More leadership, participation, synergy and transparency together with long-term investment are vital to Malta's R&I future, and the sooner the better, the experts urged.

As the bedrock of a knowledge-based society, investing in research and innovation today will bear fruit in years to come. This means long-term planning is essential, and Malta will need to reform its education system, its approach to fundamental and applied research, and how it sees innovation in the wider economy. More effective organisation of R&I at the government level is also needed, according to the expert review.

It was at the request of the Maltese Parliamentary Secretary for Financial Services, Digital Economy and Innovation that the Horizon 2020 PSF panel – experts and peer reviewers from Switzerland, Belgium, Portugal, Slovenia, the Netherlands, Ireland and Portugal – interviewed 72 representatives of 25 organisations covering all parts of the Maltese research and innovation system, and carried out an online survey with PhD and MPhil students.

Maltese authorities wanted an external and independent view on a central question: Does the country have adequate policies, structures and resources, as well as measures and instruments to sustain its future as a knowledge-based economy? The answer to which feeds into Malta's national strategy for R&I post-2020.

Open minds, political boldness to push ahead

Despite success in selected areas of research and innovation, Malta is at the bottom end of the EU-28 table on overall R&D investment, and sits in last place for government R&D spending in particular. Looking at the figures, but also at policies and governance issues, the PSF panel concluded that both the public and private sector need to invest significantly more in research, development and innovation to ensure the future prosperity of the country. Necessary changes call for open minds and political boldness, according to the report which was launched at Esplora, Malta's Interactive Science Centre on 12 June.

Several PSF panel recommendations point towards the need for more transparency and strategic changes in how resources are allocated. *"We are here to help, not to please!"* says Dieter Imboden, the Swiss expert and chair of the PSF panel. *"This may be uncomfortable, but it is necessary to improve the effectiveness of the whole R&I system."*

The panel recommends that Malta nominates an 'R&I champion' at the highest governmental level: one minister who not only takes the lead on these matters, but also ensures greater ownership and coordination at governmental and agency level. According to PSF peer Dermot Mulligan of Ireland, *"R&D and innovation concern all sectors of the Maltese economy (business, education, health, tourism, energy, etc.), so promoting it should be a government-wide goal aimed at achieving a truly knowledge-based society"*. Wide participation is one of the ingredients of the success of Malta on its road towards a knowledge-based society. Here, the experts support the creation of an independent 'consultative forum' representing all relevant stakeholders of the research and innovation system – companies, higher education institutions, public research organisations and civil society.

The forum could play a key role in Malta's smart specialisation strategy (RIS3) in the coming funding period. PSF expert Maja Bučar of Slovenia explains: *"With RIS3 as an integral part of its national R&I strategy, Malta has identified priority areas of specialisation through an intense consultation process. However, these areas are insufficiently known. Wider publicity on the concrete actions implemented in RIS3 and their contribution to the overall national strategy should be made."*

On the public research side, the University of Malta (UoM) and Malta College of Arts, Science and Technology (MCAST) have undergone a remarkable – and complementary – evolution both in

research and education. However, Malta lacks a channel for competitive funding of basic and applied research aimed at developing researchers' potential at these institutions. Ana Costa Freitas, PSF peer from Portugal comments: *"Compared to most other European public research actors, this deficiency is a serious competitive disadvantage for public research organisations in Malta."* The panel strongly recommends the establishment of a new 'Maltese research fund' for competitive funding of basic and applied research.

UoM and MCAST have the potential to play a key role in serving society's needs (the so-called 'third mission'), as well as in developing highly skilled people at the centre of the knowledge-based economy. *"Together with the government, UoM and MCAST should develop an efficient system to support (and retain) scientifically talented individuals from school up to the highest university level, while attracting scientific talents worldwide,"* notes PSF peer Tiago Santos Pereira from Portugal.

Dealing with fragmentation

The Malta Council for Science and Technology (MCST) is considered by the panel to be a central player in the country's R&I system. Transforming this agency into a 'policy intelligence unit', which manages external evaluations of policies and instruments, would significantly boost its value, the panel asserts. This 'MCST+' would also manage the new 'Maltese research fund' as well as the FUSION programme for cooperative research projects. FUSION should be upgraded with a significantly increased budget for the existing funding line, as well as a new funding for research projects in higher education institutions and public research organisations in RIS3 priority areas.

Malta's highly fragmented portfolio of policy instruments needs to be tackled according to Claire Nauwelaers, the Belgian expert and PSF rapporteur: *"There is neither an overall view nor clear responsibility over the policy mix. Agencies and funding bodies are designing their instruments separately, without a clear view on complementarity with others in the system. The agencies also don't assess the effectiveness of their own instruments or the policy mix as a whole, from an outcome-based perspective."*

To address these gaps, the panel recommends incentivising R&I in the private sector and stimulating public-private partnerships. A range of shortcomings in the policy portfolio has been identified, including mismatches between needs, target groups and intervention modes and poor take-up of several instruments. The panel proposes more coordinated and simplified instruments targeting companies. *"More proactive management modes within agencies in charge would also help in raising awareness and provide guidance to potential beneficiaries,"* says PSF expert Jan van den Biesen from the Netherlands. New company creation is a good opportunity for Malta, so the panel advises that the multiple schemes for start-ups be fully integrated into an 'easy-to-navigate' innovation support system.

As a small and open economy, Malta competes in the global market place for exports, investment, talent, innovation and research. Malta has established links and well-defined priorities for participating in Horizon 2020 project consortia. It is crucial that its authorities further reinforce international, multilateral and bilateral collaboration, including in the field of digital innovation, as a pillar of its research and innovation strategy.

The PSF panel's proposed recommendations and tools are designed to help Malta sustain its current momentum while paving the way for longer-term success radiating from its investment in a knowledge-based society today.

For further information:

The Final Report of the PSF Peer Review of the Maltese Research and Innovation System:

<https://rio.jrc.ec.europa.eu/en/library/peer-review-maltese-ri-system-final-report>

The PSF Peer Review of the Maltese Research and Innovation System:

<https://rio.jrc.ec.europa.eu/en/policy-support-facility/peer-review-maltese-research-and-innovation-system>

The PSF Peer Reviews: <https://rio.jrc.ec.europa.eu/en/policy-support-facility/peer-reviews>

Seeking to improve the design, implementation and evaluation of research and innovation policies, the PSF provides expertise and practical support to Member States in a number of ways: Peer Reviews of national R&I systems, Specific Support to policy reforms, and project-based Mutual Learning Exercises to improve policy-making and implementation. It is funded under Horizon 2020 the EU's research and innovation programme with up to €20 million.