



Boosting the Engagement of Cyprus's Publicly Funded Universities and Research Institutes with the Business Community

A PSF expert panel has examined how Cyprus's publicly funded universities and research institutes can increase their engagement with the country's business community. The panel found that their engagement is, indeed, currently low. The main reason is not an unwillingness to engage but a shortage of firms with sufficient "absorptive capacity" as to be able to benefit from the research, laboratory and consulting services that the universities and research institutes could offer: where there is very little effective demand, developing sustainable supply is practically impossible. It follows that measures to boost engagement with the enterprise sector need to go hand in hand with policy action to raise business demand for knowledge-based services.

The first Cypriot public university began operations barely 20 years ago, in 1992. Since then the island's university sector has expanded remarkably. There are now three public universities, five private ones, and three non-profit colleges. Together they count some 44,000 students, almost half of whom come from abroad. In addition to the universities there are three public laboratories and several private, non-profit research organisations doing high-level work.

The universities produce a significant output of qualified young people each year; indeed, one of the striking things about Cyprus is the high level of tertiary education attainment among the population at large: in 2017, 54.9% of the population aged 30-34 had a tertiary educational qualification, ranking the country second in the EU.

As the university and research sectors grew, there was no doubt **an expectation that their expansion would generate positive spill-over effects for the economy**: student output would provide well-qualified human resources to boost business development, and research output would supply firms with new knowledge for innovative growth. But **those expectations have not been met**. Many Cypriot graduates fail to find employment on the island and leave for better opportunities abroad: **brain drain is endemic**. A key reason can be deduced from the size structure of the Cypriot enterprise sector: fully 95% of the island's firms are micro-enterprises (i.e. have less than 10 employees), and the great majority of them are active in traditional trades and local services. There is little engagement between the universities and research institutes, on the one hand, and the enterprise sector: **in 2016 the Cypriot higher education sector derived just 0.8% of its income from business sources**, compared with 12.2% and 11.3% respectively for two other smaller EU countries, Lithuania and Latvia. For those and other reasons **the European Innovation Scoreboard has consistently classed Cyprus since 2011 as a "moderate innovator"**.

It was against this backdrop that the Cypriot authorities turned to the Horizon 2020 Policy Support Facility (PSF) for strategic advice and operational recommendations to boost the engagement with business of the country's publicly funded universities and research institutes (which, for convenience, we here term the "Research Institutions", or "RIs" for short). The PSF appointed a panel of innovation experts from Austria, Finland, Greece, Luxembourg and The Netherlands to make an analysis and give advice and recommendations.

The expert panel made two two-and-half day visits to Cyprus. The first, in late May 2019, was aimed primarily at mirroring the terms of reference for the panel's assignment against the reality on the ground as expressed by the different stakeholder communities (RIs, business associations, venture capital and business angels, government ministries and agencies, business incubators, etc.). The panel's main conclusion from that visit was that while it is true that the Cypriot RIs' engagement with business is low, the essential reason is not an unwillingness to engage but rather a lack of significant demand for the research, laboratory, consulting etc. services that the RIs might offer: without effective demand it is practically impossible to develop sustainable supply. Hence the panel's initial conclusion that **policy action focussed on the supply side alone, without simultaneous action to grow the demand side, would most likely fail: it takes two to tango!**

The outcome of the first country visit was an initial set of recommendations for boosting the RIs' engagement with business, coupled with the panel's insistence on the need for simultaneous policy action to grow the demand side. The second country visit, in late September 2019, was focussed on testing those initial recommendations through a second series of meetings with broadly the same stakeholder communities as previously. Some adjustments to the original recommendations were made, and some new proposals added.

It is to be hoped that 2019 will prove in retrospect to have been a year of great change in Cyprus's approach to research and innovation. During its May visit already, the expert panel learned that **a profound reform of Cypriot R&D and innovation policy was already in the making**. Some time later, in the summer of 2019, a comprehensive and ambitious "Cyprus Research and Innovation Strategy (CRIS) Framework 2019 - 2023" was published. The declared goal of the new strategy is for "Cyprus to become a dynamic and competitive economy, driven by research, scientific excellence, innovation, technological development and entrepreneurship". Ambitious targets have been set for raising R&D expenditure in both the public and private sectors, and major governance reforms have been announced, including the creation for the first time of a Ministry for Research and Innovation. Anne-Christine Ritschkoff of Finland's VTT Research Centre and chair of the expert panel was impressed: *"The scope and scale of the CRIS amount to a total reset of Cyprus's approach to research and innovation policy; all now depends on maintaining the political momentum and ensuring that the new objectives are resolutely pursued in the implementation phase of the new strategy"*.

A second encouraging development in 2019 was Cyprus's considerable success in winning six Centres of Excellence under Horizon 2020's Twinning and Teaming programme. Relative to the size of the country, Cyprus outperformed all other EU member states qualifying for the Twinning and Teaming programme under Horizon 2020. The new centres will receive significant launch funding from both the EU and the Cypriot government and once fully operational are expected to employ about 500 doctoral and postdoctoral personnel. The expert panel's rapporteur, Christopher Hull, remarked: *"The six new centres – taken together with the new CRIS research and innovation strategy – are a potential game changer for Cyprus. There is a great opportunity here to build innovation eco-systems that over time change the face of the Cypriot economy. But, as always, implementation will be critical: the centres need to be managed from the beginning as engines for innovation and socio-economic impact – not just as centres that do excellent scientific research"*.

Three Priorities, Fifteen Recommendations

The expert panel makes fifteen recommendations grouped under three headings. The first set of recommendations aims to **reset the framework conditions under which the RIs engage with business**. The second group is about **professionalising the RIs' service offerings**. The third priority is to **revise the mix of public schemes incentivising research and innovation so as to actively support RI-business interaction**.

The first set of recommendations aim to **reset the framework conditions under which the RIs engage with business** and, indeed, with other external customer segments, notably the public and non-profit sectors. The recommendations include:

- institutionalising a **third mandate** for all the RIs - beyond "education" and "research" – **to engage in "knowledge transfer/innovation"**;
- providing the RIs with a **financial incentive to encourage their engagement with business**;
- clarifying the **EU State Aid regulations regarding RI-business interaction**, which currently appear – rightly or wrongly – to hold back many Cypriot RIs from engagement with business;
- revising the **deficient 2018 Cypriot university spin-off law** to align it with European best practice.

The second priority is to **professionalise the RIs' service offerings**, to make them more transparent for business. The panel recommends that the RIs should work together, with government support, to:

- develop **similar, structured service offerings for contract and collaborative research, laboratory services, and technical consultancy, underpinned by standard forms of contract (templates) and clear pricing principles and practices**;
- prepare for the implementation of **full economic costing of their services to external parties** in order to resolve (real or imagined) constraints imposed by the EU State Aid Framework.

The third priority is to **review, revise and complement the mix of public schemes supporting research and innovation so as to actively encourage RI-business interaction**:

- a **competitive Key National Infrastructure Programme** is proposed so as to provide the RIs with a stable, predictable source of funding for the acquisition, maintenance and upgrading of large-scale research facilities while at the same time avoiding unnecessary duplication of investment and promoting joint use of facilities;

- the existing **business innovation voucher scheme**, which can be a valuable “first-time” tool for stimulating innovation appetite in small firms, should be reviewed and expanded;
- a **collaborative research programme** not tied to specific scientific fields or economic activities but **targeting a firm-specific innovation project** intended to launch new or improved products or services and/or production processes should be introduced;
- a **graduate placement scheme whereby SMEs receive financial assistance for the employment of recent university graduates** for a period of 12-24 months is recommended with the twin objectives of raising the absorptive capacity of firms and exposing graduates to the business world.

For further information:

[The PSF Specific Support to Cyprus – Final report](#)

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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 policymaking and implementation.