Well established

RTOs have been making a major contribution to social progress across Europe for more than half a century, argues Christopher John Hull

Technopolis Group, a leading consultancy specialised in designing and evaluating research and innovation policies and programmes, has recently completed a study – the first of its kind – on the economic and social impact of research and technology organisations (RTOs). This independent study was commissioned by the European association of research and technology organisations (Earto), which represents the interests of more than 350 RTOs from across the continent.

RTOs bring together a rare and long-established array of capabilities and activities, from basic and applied research to advanced engineering, design and development, measurements, tests and prototype production, and industrial exploitation through contract research, licensing and spin-outs. They serve both public and private clients, including many SMEs. Their typical business model is a mixed one combining public core funding, public competitive funding and enterprise income in roughly equal proportion. Underpinning all they do is a pragmatic focus on solving real world problems and delivering innovations that have real world value.

The study demonstrates that RTOs are key actors in the European innovation system, with a combined annual turnover of around €20bn annually, which would put them in the top 100 of the FT European 500 if they were organised as a European multinational. Their annual economic impact is estimated to total between €40 and €50bn – and up to €100bn when account is taken of cumulative social returns (spillover effects). These figures are only estimates but clearly demonstrate that RTOs make a major contribution to economic competitiveness in Europe.

RTOs have been making a major contribution to social progress across Europe for more than half a century. But while their track record is undeniable, it goes largely unrecognised, and their unique position in the European innovation system is poorly understood. The study states unequivocally that it is time for policymakers to take account of RTOs' ability to deliver practical and cost-effective innovative solutions.

To make RTOs more visible, Technopolis recommends that the European commission should ask Eurostat to collect statistics about RTOs, as is done for the university sector or business R&D, and should encourage the OECD to act in a similar way.

Against a backdrop of fiscal austerity, pressing grand challenges and ERA objectives, Technopolis also says European and national governments must look to leverage existing proven innovation strengths. This could be achieved by fully unleashing the power of RTOs so that they can make an even greater innovation impact than they do already, notably in tackling the grand challenges. RTOs have a unique set of skills and a multidisciplinary outlook which could be well put to use in forming strategic alliances to address grand challenges such as climate change or ageing. They have continuously demonstrated their ability to pool resources and knowhow transnationally for the purposes of long term, ambitious programmes. One example is the SET-plan's European energy research alliance (EERA), and the EERA model could be replicated in the new European innovation partnerships.

More generally, says the report, the commission should recognise that the present RTO landscape in Europe is sub-optimal because RTOs are to some degree locked into their national markets by the fact of their national core funding. This results in duplication of similar activities in different countries. A gradual substitution of European funds for national core funding would break down the barriers and encourage RTOs to specialise and differentiate themselves through a controlled process of cooperation and competition. Another solution would be to create a European common market for knowledge services. Finally, the commission should provide further competitive funding for shared infrastructures for applied research and demonstration activities. The end result would be a more joined-up and still more cost-efficient RTO sector. ★

Christopher John Hull is the secretary general of the European association of research and technology organisations (Earto)