



EUROPE: EU to launch 'industrial' PhD



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The European Commission is to launch a European Industrial Doctorate, or EID, based on a scheme that has operated in Denmark for some 40 years.

As a pilot, EUR20 million (US\$27.7 million) will be allocated to the scheme within the EC's Marie Curie action programme's Initial Training Networks, due to be announced in July.

A panel will be established to evaluate the applications, and a mechanism will be set up to transfer resources between the EID panel and the other eight scientific panels, securing additional funding for the EID scheme for the possibility of many excellent proposals.

The scheme, devised following a recommendation by the European Parliament, might have a leverage effect significantly beyond the sum earmarked for the programme.

In Denmark PhD students are employed in a private sector company and at the same time enrolled as a PhD student. The 'industrial researchers programme' was initiated in 1971 and has been strengthened over the years. Before 2003, 30 to 50 projects were initiated each year, but the number has since risen to 80 to 120 a year. By 2009, approximately 1,200 projects had been started.

The programme was initiated by the Danish Council for Technological Innovation and administered by the Danish Agency for Science, Technology and Innovation (DASTI).

DASTI subsidises the PhD salary, typically by 30% to 50%. The subsidy is DKK14,500 (US\$2,700) a month, and the university has its costs for supervision covered. Subsidies are available for project-relevant stays abroad.

MEP Morten Løkkegaard, who has promoted the EID scheme in the European Parliament

through the Alliance of Liberal Democrats for Europe consortium, told *University World News*: "I am happy to see there is support for the Danish PhD model at the European level and I am confident that this will be a strong asset in Europe's quest to compete in key areas such as innovation and growth."

He said it was important to find concrete ways to compete with China and India.

Katrien Maes, chief policy officer of the League of European Research Universities (LERU) told *University World News*: "We think the European Commission focus on doctoral training in the 'innovation union' initiative is justified and we understand the EC's focus on industrial PhDs. They are a small part of the general PhD landscape but can play a useful role."

She said industrial PhDs need to be closely linked in to the academic environment, providing as close and symbiotic a relationship as possible between the academic and industrial partners. "Universities are the best guardians of such substantive quality assurance," she said.

A recently published Danish evaluation report, which examined the experience of industrial PhDs in the country since 1971, found that industrial PhD students spend 50% of their time in a private company and 50% at a university taking the PhD degree.

The evaluation is monitoring wage and career characteristics of industrial PhD candidates compared to other doctorate holders, and the effects on participating companies measured in patents and licences, growth and new market opportunities.

The industrial PhD candidates earn 7% to 10% more than regular PhDs and they are more likely to be found at top levels of their organisation's hierarchies compared to normal PhDs.

The study revealed that companies that are hosting industrial PhD candidates to see an average increase in patenting activity in association with hosting the projects. But the report was not able to identify "robust relations between having industrial PHD projects and total factor productivity developments".

The sample consists of 1,177 projects in 514 companies. Around one in three of the companies has invested in more than one project, and some companies have hosted up to 20 projects.

Previous evaluations have uncovered several positive effects for companies. These include getting new knowledge, patents and licences growth, new market opportunities and increased access to academic networks.

The European University Association concluded in 2009 that participating candidates enjoy better employment opportunities due to improved skills.