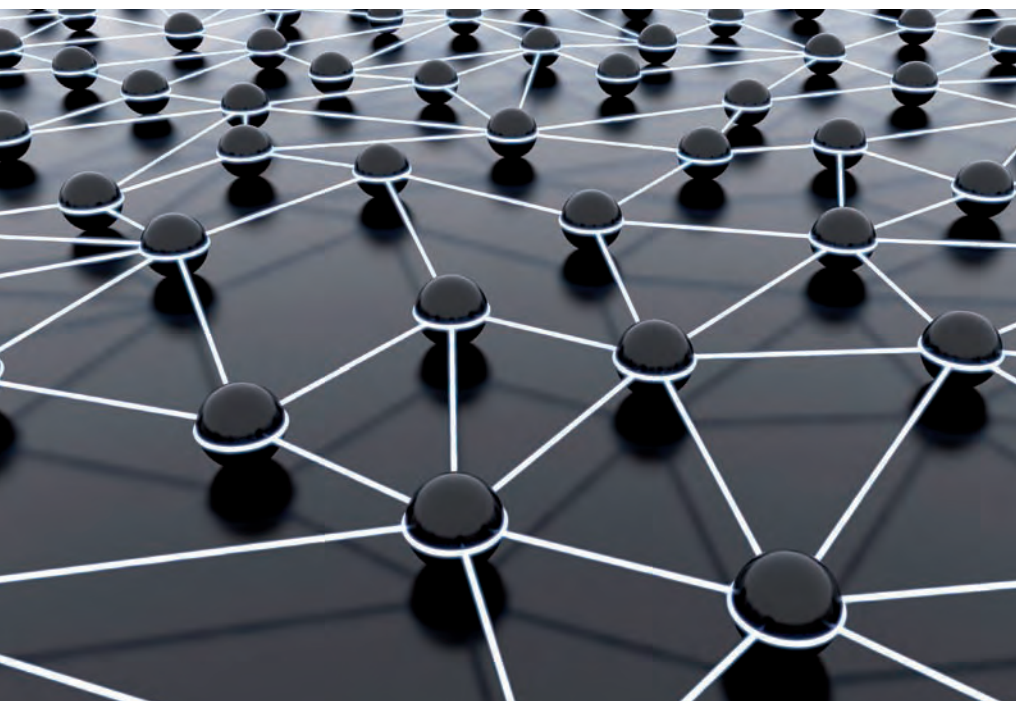


# Restructuring research for international success

A review of the research support structure in Finland is leading to much larger industry-led projects with increasing cooperation at European and global level involving the whole value chain in the areas concerned. A series of strategic centres for science and technology is providing a new dimension in Finnish innovation policy. The first centres opened in spring 2008, with ICT as a key initial area.



“We have of course been participating in Europe and globally since the 1980s but we are now emphasising international cooperation more and more,” explains Dr Kari Tilli, Director Telecommunications and Electronics Industries at Tekes – the Finnish Funding Agency for Technology and Innovation. Tekes is the main government financing and expert organisation for research and technological development in Finland.

“Finland is a small country and, when looking not only at science but also at industrial matters, we can’t cover all elements of the industrial value chain. We need new scientific, industrial and technological partners to support our specialised and focused players.”

Information and Communications Technology (ICT) is one of the leading

sectors in these types of international matters. “Finland is particularly specialised in ICT and telecommunications but even there we cannot cover the whole value chain at a national level and so we need international partners – both technological providers and customers. ICT is leading in such cooperation but other sectors are following.”

“Looking at ICT, the USA, Europe, Asia and Japan have different strengths and from our viewpoint it is obvious, particularly in the telecommunications sector, that many important players are European and Europe is also strong in semiconductors and software. It is therefore natural to cooperate with European players.”

## Strategic research centres

The ministry-level Science and Technology Policy Council is the key player in defining

national research objectives in Finland. To increase the quality and relevance of public research in an era of increased globalisation, the Council realised that it was essential to prioritise science, technology and innovation activities, increase specialisation in fields of strength and encourage the internationalisation of education and research.

Therefore, in June 2006, the Council decided to create a series of internationally visible, top-level research units, research, technology and innovation (RT&I) centres and programmes in Finland. The RT&I centres are intended to strengthen those research and technology areas that are important for the future of the Finnish economy and society, create national skills and respond better to new challenges of the national economy and for businesses. The new centres were also expected to foster economic growth, renewal and employment.

Five strategic centres were envisaged as part of the first phase. They cover forestry, metal products and mechanical engineering, energy and environment, health and well being and ICT industry and services. These centres are non-profit companies with the key players in the relevant industrial and innovation clusters – large companies, small and medium-sized enterprises (SMEs) and research units – as shareholders. Centres are business/industry-led activities with private companies owning the majority of shares. Public funding agencies are not shareholders but are committed to providing long-term funding for the centres.

## > Prioritising strengths

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*Dr Kari Tilli, Tekes*

### **Defining specific research agendas**

“These centres define specific strategic research agendas (SRAs) and decide in which sectors they want to cooperate,” explains Dr Tilli. “They will implement their SRAs through long-term research programmes that gather together all key players in a certain area. In ICT, the main idea is to create a new global ecosystem, where research activities are defined by the companies involved, rather than only project-level cooperation.

“Our intention is for industry to be fully involved in planning research activities and implementing the project industrially in a real joint approach. Current research programmes are somewhat separate. Researchers carry out their work and then report their results to the companies. Now the intention is to do the research together.”

The centres have only just been set up and are now establishing their first large projects. “Our plan is to start the real joint research this spring,” says Dr Tilli. “Our existing biggest programmes involve about 100 projects with average budgets of 1 million euro each. We now want to create activities with a large number of players cooperating. The annual budgets for each of four planned big projects could be in the region of 10 million euro.”

### **Key role for EUREKA in Finland**

There is no specific budget for EUREKA projects in Finland and there is always tough competition for funding. However EUREKA projects have good possibilities of obtaining finance as they fulfil key Tekes goals. They support growing companies, particularly growing SMEs. The emphasis is on international cooperation between different companies, and with researchers and companies.

“Today our participation in EUREKA is very much focused on the Clusters,” says Dr Kari Tilli of Tekes. “For ICT this means ITEA 2, CELTIC, MEDEA+ and EURIPIDES, which have been rather good for our purposes. We want to reinforce this cooperation and of course use all types of possibilities that are available.”

“Our participation in ITEA 2 is very high – 10% of the total co-operation. It is very close to our needs at present. But our main emphasis now is to increase and widen our cooperation. There are certain players that have been very active, but we want to broaden this base. I’m thinking of SMEs, some of which have been very active in EUREKA – but there is much potential to broaden this participation.”

Tekes deals with many companies active in innovation matters. “When we discuss with these companies, we see they need international partners. We are emphasising to SMEs that EUREKA is a very good instrument for cooperation when they need connection with clients and not only for technological but also for business purposes.

“For many of our SME’s, their clients are not Finnish companies but rather European companies. This is a good way to work together. Then of course we also have connections between EUREKA Clusters and our national programmes. There are six or seven large national technological programmes in ICT involving companies and researchers. These also support international participation in EUREKA Clusters.”

### **Contacting EUREKA in Finland**

The Finnish national EUREKA Office is part of Tekes, which is also the main funding body for Finnish EUREKA participants.

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