

PART II
Chapter 19

United Kingdom

As there is no nationally managed cluster programme per se, this case study for the United Kingdom reviews a range of cluster initiatives supported by the Department of Trade and Industry that are designed and implemented by the Regional Development Agencies (RDAs) and the Devolved Administrations (DAs). Programmes vary but have included commissioning regional mapping studies, identifying and building links with important regional clusters and using clusters as the vehicle for wider economic development initiatives.

1. Programme(s) and their goals

The United Kingdom does not have one single overarching programme to support cluster development. UK Government policy focuses on creating the conditions to encourage the formation and growth of clusters, not to artificially create them. National policies such as on innovation, skills and enterprise assist this agenda. Government funding comes in the form of generic business support, such as access to finance grants, innovation support services and capital infrastructure, such as Wet Labs and Science Parks. Specific responsibility for delivering cluster policy rests with Regional Development Agencies (RDAs) and the Devolved Administrations (DAs) of Scotland, Wales and Northern Ireland. The English regions will develop and prioritise strategies for clusters, as part of their Regional Economic Strategy. Finance for the English regions comes from a Single Programme combining funds from central government departments including the Department of Trade and Industry (DTI); the Department for Communities and Local Government; the Department for Education and Skills; and the Department for Environment Food and Rural Affairs.

2. Context: Situating the programme in the governance framework and policy strategy(ies)

Features of the economy that have an impact on cluster development

Although the United Kingdom stands ahead of many member countries on labour productivity, it ranks below its major competitors such as the United States, Germany and France. It has become a priority for the government to boost productivity by addressing the weakness in innovation, skills and infrastructure (OECD, 2005).

Historical development/evolution: where the programmes came from

Clusters were initially identified as an important area of economic development in the December 1998 Competitiveness White Paper. Having led a full examination into the Biotechnology Clusters, it was found that many of the identified issues also arose in other sectors.

As a result, a high-level Clusters Policy Steering Group, led by Lord Sainsbury, was set up to identify barriers to cluster development and recommend appropriate new policy initiatives to Cabinet. This Group, along

with a cross-Whitehall officials group, ran between late 1999 and early 2003. The work of both groups was informed by a mapping of existing cluster activity, published in February 2001.

At the same time, a joint DTI and DfEE (Department for Education and Employment) White Paper entitled “Opportunity for All In a World of Change” (the follow up to a 1998 White Paper) recognised the key role cluster development could have on the regional economy. It encouraged Regional Development Agencies (RDAs) to develop existing and embryonic clusters in their region, building on their natural capabilities.

Distribution of roles between the national and regional levels

The process of consultation culminated in the decision that government policy should focus on creating the conditions to encourage the formation and growth of clusters, not to artificially create them. It was also decided that responsibility for taking forward the strategic aspects of cluster policy development would rest with the RDAs and DAs.

Regional development agencies were created to design and manage regional economic strategies, to foster competitiveness (a key issue for the Treasury which had noted that underperformance of some regions, particularly in the north of England, constituted a major drag on national GDP), to lead regeneration projects and to deal with regional employment. Funding was initially directly provided by central government – in most cases between GBP 40 and 100 million, GBP 176 million was the maximum – on the basis of three-year plans approved by the Secretary of State for Trade and Industry. As such, the Regional Development Agencies were regional institutions that were closely linked to and strongly associated with central government.

The Regional Development Agencies are funded by six government departments. Following the Spending Review 2004, the planned contributions are shown in Table 19.1.

Table 19.1. Funding sources of UK Regional Development Agencies

	Millions GBP			
	2004-5	2005-6	2006-7	2007-8
Trade and industry	234	463	476	483
Office of Deputy Prime Minister	1 511	1 568	1 633	1 676
Environment food and rural affairs	46	72	73	74
Education and skills	42	43	44	45
Trade and investment (UKTI)	13	13	13	13
Culture media and sport	2	6	6	6
Total	1 847	2 163	2 244	2 297

Source: Government of the United Kingdom (HM Treasury), 2004.

Beginning with modest powers and budgets, Regional Development Agency responsibilities have been gradually increased. In April 2005 they were granted new responsibilities including the management of the Business Links Service, the development of Regional Skills Partnerships, and an increased role in supporting business-university collaboration.

The RDA's work in this area is linked through the DTI-RDA Cluster Liaison Group and various groups which bring together cluster initiatives in the same sector in different regions. For example, the North West Development Agency (NWDA) works closely with Yorkshire Forward and ONE NorthEast through the Northern Way initiative. This includes a workstream focused on cluster development under which several joint projects in chemicals, food and drink and advanced engineering have been developed.

Role of the programmes in the context of science and technology (or innovation) policies

At a national policy level a number of cross-cutting areas have an effect on cluster development. The most critical relate to innovation and skills. The DTI's 2003 Innovation Review identified access to networks and sources of new knowledge as two of the most important determinants of business innovation performance. Because innovation is a complex process, success relies on the coming together of a variety of players, such as suppliers, customers, other firms, universities, research and technology organisations and other intermediaries. Together these players form part of the knowledge transfer system. Many businesses may not make the most of their potential for innovation and often this can be attributed to a lack of awareness and access to the latest technological knowledge and breakthroughs.

The most successful clusters will be those that excel at generating and disseminating knowledge and exploiting it commercially. The UK is encouraging higher education institutes (HEIs) to play a more active role in the business world, primarily through the work of the Office of Science and Innovation (OSI) which is responsible for knowledge transfer/exploitation funding programmes. This is done through the Technology Programme, which provides funding to facilitate further investment in science, engineering and technology with the active participation of business and industry. The Technology Programme is made up of two products: Collaborative Research and Development and Knowledge Transfer Networks (KTNS).

- *Collaborative Research and Development*: The objective of Collaborative Research and Development is to assist the industry and research communities to work together on Research and Development projects in strategically important areas of science, engineering and technology, from which successful new products, processes and services can emerge. It also primes the flow of the

latest knowledge and thinking from the UK's science, engineering and technology base to business. Collaborative Research and Development projects must involve two or more collaborators, at least one of which is from industry. The Technology Programme supports three categories of research: pure or oriented basic research, applied research and experimental development.

- *Knowledge Transfer Networks*: are single national over-arching networks in a specific field of technology or business application. It brings together a variety of organisations, such as businesses (suppliers and customers), universities, research and technology organisations, the finance community and other intermediaries who will provide a range of activities and initiatives to enable the exchange of knowledge and stimulation of innovation within this community.

In July 2004, the government published the "Science and Innovation Investment 2004-14" which set out the key targets for science and innovation policy to improve the situation. The main objectives were:

- Raise total UK R&D spending to 2.5% of GDP by 2014, with business R&D rising to 1.7% of GDP.
- Develop stronger knowledge transfer and exploitation of research.
- Position the United Kingdom as an acknowledged leader on science and innovation issues.
- Mainstream science and innovation in decisions across government.

An update of the strategy in 2006 envisaged a much enhanced role for the Technology Strategy Board – a private sector led consultative body set up in 2004 – giving it a lead role in identifying areas for investment and an operating structure independent from the DTI. A full review of current policy, led by the former Industry Minister Lord Sainsbury, will report to the government in mid-2007.

Role of the programmes in the context of skills and education policies

The existence of a strong skills base is critical for the success of a cluster. The UK Government works with employers and individuals to address the demands of business, in particular, by providing support through Learndirect; Learning and Skills Councils; and the Skills for Business Network. Cross-government commitments to the skills agenda are set out in the White Paper entitled "Skills: Getting on in business, getting on at work", published March 2005.

3. Details on programme budgets and timeframes

Two of the main areas of focus of the activities of the RDA are supporting business excellence and promoting innovation. The RDAs allocate resources

Table 19.2. **Budgets for UK Regional Development Agencies**

Millions GBP

Total RDA allocations by region	2005-06	2006-07	2007-08
Advantage West Midlands	272	284	291
East of England Development Agency	129	134	138
East Midlands Development Agency	156	163	167
London Development Agency	373	391	400
North West Development Agency	382	400	409
One North East	240	251	258
South East England Development Agency	157	163	167
South West of England Development Agency	153	159	164
Yorkshire Forward	295	310	316
Total	2 157	2 256	2 309

Source: Government of the United Kingdom (Department of Trade and Industry), 2005.

from the overall budgets shown in Table 19.2 to achieve specific targets in these two fields. Cluster initiatives were promoted by the DTI as one key instrument that the RDAs could use in this regard.

To assist local policy makers, in April 2004 a Practical Guide to Cluster Development was published. It draws on analysis and evaluation material, setting out the critical success factors that can help clusters to flourish. The report provides advice on how to design and measure a cluster strategy and gives examples of the type of interventions that can encourage the successful development of clusters. Nonetheless, the approaches, priority clusters and funding levels vary from region to region.

4. Targets and scope

The following are some specific examples of how the overall framework has given rise to practical cluster initiatives. They show how the DTI-RDA structure has encouraged very different initiatives including single RDA projects and collective cluster initiatives involving several RDAs together, both high-technology and more traditional sector initiatives. Work has included commissioning regional mapping studies, identifying and building links with important regional clusters and using clusters as the vehicle for wider economic development initiatives.

1. *Motorsport Development UK*: is a private/public sector partnership responsible for implementing a five-year investment programme in UK motorsport. Funding comes directly from the DTI and four RDAs, East Midlands, Advantage West Midlands, East of England, and South East, which cover the geographical area known as Motorsport Valley. Since April 2004, it has committed to invest GBP 5.7 million in five key project areas. This investment has been matched by

GBP 7 million of contributions from industry. The aim is that projects commissioned will become financially self-sustainable by March 2009.

Motorsport Development UK focuses investment in five areas:

- Energy Efficient Motorsport (EEMS) – Energy efficiency and low carbon emissions may be the most important challenges facing the automotive industry. EEMS aims to demonstrate the UK’s engineering expertise in these fields and win a greater share of global business and investment.
- Business Development – projects to assist business to be more productive and innovative. Also focussed on growing overseas markets and sharing technologies and processes with other industries.
- Motorsport Academy – aims to meet skills needs by developing learning resources, assessing training needs, and helping collaboration between employers, universities, colleges and private training providers.
- Learning Grid – a co-ordinated set of activities for students and school pupils, aimed to inspire and encourage them to consider careers in science, technology and engineering.
- Widening Participation – focussed on increasing participation and diversity within the motorsport sector, particularly through volunteers.

2. *North West Development Agency*: The Northwest Regional Economic Strategy (RES) 2006 identifies the development of key internationally competitive sectors as a priority. This RES Priority Action provides the basis for the continuation of the NWDA Cluster Development programme which was formally launched in March 2000. The programme is mainly delivered by Regional Cluster Organisations which are funded by NWDA from its Single Programme through a Service Level Agreement. With the exception of BioNow, the Regional Cluster Organisations are independent not-for-profit companies limited by guarantee with a Board of Directors almost entirely from the sector they cover. The NWDA Cluster Development programme was recently reviewed by independent consultants. Their main conclusions on the programme were:

- An industry-led solution to the key RES objectives for business development.
- Provides industry buy-in and intelligence for a range of Agency and other sector led programmes.
- A widely used methodology for regional economic development, appropriate for the North West, which fits with national policy.
- The programme has produced positive results with the potential to improve, building on what is now in place.

3. *Northern Ireland: Company of Irish Bakers* is a group of six bakers from independent home bakeries in the northern counties, who collectively share 500 years of skills and experience. The group initially got together informally, four years ago, to share recipes, product ideas, techniques and even customers. Recently they have been working with other Irish artisans such as organic dairies, traditional smoke houses, fruit farmers and millers, to develop a distinctively Irish range of cakes and biscuits for export to other parts of the United Kingdom. Facilitated by Northern Ireland's Centre for Competitiveness (CforC) and Invest Northern Ireland (INI), meetings were formalised with several workshops held to clarify the group's purpose and CforC helped with public relations. The group also participated in the INI's Design Development Programme and obtained Design Consultancy from the Conran Design Group. This led to the development of a new brand "The Company of Irish Bakers", which included a new range of packaging. They have done this with: financial support from INI, facilitation, administrative and public relations support from CforC, an online community administered by CforC, INI/Conran Design Consultancy, INI support to exhibit at Trade Shows and the leveraging of GBP 40 000 of support from INI programmes.
4. *The Cambridge Knowledge-Based Cluster* is made up of a number of overlapping and complementary clusters of firms, public sector organisations and institutions reflecting the outcome of a long process of economic, scientific and technological evolution stretching back more than a century. It has not been driven by the public sector so has not had a top-down infrastructure imposed upon it. The objectives have been determined by the business-led networks and informal groupings and are not aggregated into one set of objectives. However, it does need support. In particular, the East of England Development Agency (EEDA) supports the cluster through the development of a network of enterprise hubs. The Enterprise Hubs programme is an EEDA core activity and the delivery vehicle through which EEDA deploys its interventions in response to the Government's ten-year Science and Innovation Investment Framework, published in 2004.
5. *The North East Process Industry Cluster (NEPIC)* represents four hundred supply chain companies across the North East of England who operate in the process industries sector. Two hundred of these companies would recognise themselves as chemical, pharmaceuticals and biotechnology. As such NEPIC represents 25% of the region's economy and a similar percentage of regional employment. Established less than a year ago, it aims to create more jobs, act as a catalyst for new businesses and enable supply chains in these sectors to be more visible. The initial concept was to find a way to get better co-operation across and between regional firms. It has done this through engagement with the most senior people in each company in each region. Some fifty leading CEOs defined the areas where business improvements would yield the greatest value added, forming themselves into teams to address these needs.

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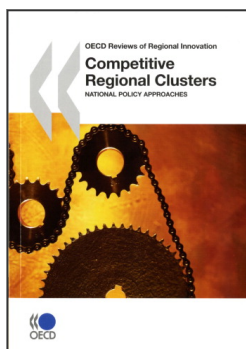
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