Business Clusters Plans 2005-08 Executive Summary

April 2005

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1. Cluster Plans - Executive Summary

1.1 Introduction

The Region's business clusters aim to grow the competitive advantage and reputation of the Region in key markets and industries, and to increase its long-term wealth creation capability. *Delivering Advantage*, the West Midlands Economic Strategy gives clusters a significant role in transforming the regional economy.

Each cluster has developed a three year Business Plan for 2005-2008. In these plans the clusters advance a vision and a clear strategy, together with a programme and a set of specific and realistic actions to implement it.

These action plans have focus and clarity, and build on existing regional strengths. Each plan identifies a small number of long-term changes which are necessary for growth. Each plan encourages businesses to collaborate ("cluster") to exploit strategic opportunities; it sets out projects and initiatives which will begin to deliver the necessary changes; it also aims to influence other regional organisations to direct resources to the same areas.

The cluster plans are driven by the private sector and are demand – led. Over 120 private sector business people serving on the Cluster Opportunity Groups (COGs) have collectively devoted well over 1,000 hours to setting the direction and priorities for these plans, which the cluster executive teams have drawn up. The plans are realistic, they meet the needs of business, and have a team of people committed to take them forward.

1.2 Overview of Cluster Plans

The plans build on the manufacturing, technology, cultural diversity and other competitive strengths of the Region. A number of shared themes run through the plans: increasing value added, design, embedding innovation into companies and supply chains, exploiting the opportunities offered by sustainable consumption and production and by public procurement.

Increasing Value-Added

This key theme runs through many of the Cluster Plans. For example:

> The Screen and New Media Cluster will build on regional strengths in computer games and virtual reality, and on the unique (outside London) breadth of our creative content industries. The plan promotes cross-fertilisation between providers of different sorts of content through digital technology. It aims to build a leading position in the field of serious games; fusing games technology and creative entertainment techniques for educational applications in fields such as medical technology, heritage and law and order;
>
> The Food & Drink Cluster plan focuses on adding value to food and drink products. It includes the development of specialist incubator units at the Shrewsbury Food Park and elsewhere to facilitate new product development; and

Tourism West Midlands (Tourism and Leisure COG) intends to implement a 'Quality at Heart' initiative aimed at raising business management, skills development and service quality among cluster businesses.

Design

Several clusters will build and exploit enhanced design capability:

The High Value Consumer Products Cluster plan focuses on building a community of creative companies in consumer goods around the design theme, regardless of industry sector (whether jewellery, china, clothing or another). Its plan promotes the take-up of advanced design as a key competitive competence; and

The Business & Professional Services Cluster plan develops regional expertise in Intellectual Property Rights, which supports design-led and creative industries.

Embedding Innovation into Companies and Supply Chains

Several plans concentrate on embedding innovation into the management, business plans and shop floors/work places of regional businesses.

The Aerospace Cluster plans a Technology Exploitation Programme to ensure that innovation in areas of regional strength (electrical control systems and high temperature materials) gets anchored into local supply, providing long-term attraction to the region's multinational prime suppliers to maintain and build their presence here;

The Manufacturing plan contains a number of innovation projects which build supply chains, e.g. to deliver technology demonstrators in powdered metal composites and in fuel cells; and

The ICT Cluster plan aims to develop projects in mobile and wireless technologies to transfer innovative expertise from the region's universities to industry.

Sustainable Development Opportunities

Opportunities in sustainable development arise from environmental pressures and resulting regulatory changes, consumer demand, and the need for more productive use of resources – getting more from less.

The Environmental Technologies plan exploits local manufacturing strengths and expertise in renewable energy and waste management and includes the development of demonstrator projects to stimulate the market, encourage Small & Medium Enterprises (SMEs) to manufacture high-value components and to promote resource productivity through the Business Resource Efficiency programme (BREW) and building on the experience of the National Industrial Symbiosis Programme;

The Building Technologies Cluster plan focuses on off-site building construction (factory–made building sub-assemblies) which both plays to the region's manufacturing strengths and addresses issues around sustainable buildings like the Environmental Technologies plan;

Fuel cell initiatives feature in both the Manufacturing and Environmental Technologies Cluster plans; and

‘Destination Development’ is a feature of the Tourism and Leisure Cluster plan, including ‘destination health check’ assessments.

Public Procurement Opportunities

Exploiting public procurement is not just a source of business but a means to foster the development and early use of new technologies.

The Medical Technologies Cluster is already running programmes to exploit the region’s three ‘super hospital’ projects with their huge capital build programme, plus a regular NHS spend of some £2 billion annually on materials and services. The opportunities extend across most clusters, with manufacturing planning a programme to enable manufacturers to diversify into this market.

1.3 Effective Clustering

Collectively the Plans aim to foster the three key elements for effective clustering:

Functioning networks and partnerships;
Strong innovation base with supporting R&D activities; and
Strong skills base.

The Cluster Plans contain specific actions to ensure these factors are being actively developed.

Bodies like the Midlands Aerospace Alliance, Medilink, the Centre of Construction Excellence and HVACP (High Value Consumer Products’) Net Infinity Centre and the Regional Centre for Tourism Business Support, are designed to foster these activities and are a feature of several plans.

The Cluster Plans collectively demonstrate a large number of areas of common interest between Clusters, High Technology Corridors and Regeneration Zones and some promising projects that bring these interests together. For example, in Aerospace discussions about establishing a Centre of Technology Excellence in the Corridor and Regeneration Zone are underway. The North Staffordshire FineST network of business service professionals is a collaboration between the Cluster and the Regeneration Zone.

The Manufacturing Plan’s fuel cell and materials projects benefit the Central Technology Belt (CTB), and also support developments in the Environmental and Building Technologies Clusters. There are opportunities for cross-clustering activities in other areas such as between the clusters involved in the cultural industries; High Value Added Consumer Products, Screen and New Media, Food and Drink, and Tourism and Leisure.

Other initiatives are underpinned by collaboration with other regions. Clusters collaborate in areas of mutual interest with *emda (east midlands development agency)* in aerospace and automotive, and with other RDAs in environmental technologies and in motorsport.

1.4 Funding

These plans will collectively cost £51M of AWM funding in 2005-08 (£38M revenue and £13 M capital). They seek also to maximise the use of other funding sources: significant leverage will be sought from the private sector as well as additional public funding from European Union funds and other national and European sources
.
Advantage West Midlands has recognised the importance of the business cluster agenda by ring fencing the full £51m for this programme.

AWM committed funding ("single pot")

£M	2005-06	2006-07	2007-08	Total
Revenue	8.0	14.5	15.5	38.0
Capital	5.5	5.5	2.0	13.0

The funding of each project in the individual cluster programmes is set out in each plan (in Appendix 2.) Some cluster plans also include a number of reserve projects as a contingency. Funds are not allocated for these, but changing circumstances may enable them to be funded in future years.

1.5 Background: The Regional Economic Strategy and Clusters

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Transport Technologies
- Aerospace
- Automotive (including Motorsport)
- Rail

Business & Professional Services

Food & Drink

Tourism & Leisure

Manufacturing

Information & Communications Technology

Medical Technologies

The executive summary for each individual cluster plan follows this overall management summary. The individual Cluster Plans each contain the following sections:
1) the brief market situation and the Region's strengths,
2) cluster vision,
3) the objectives which flow from these
4) the action programme it proposes
5) the business case for projects planned within the action programme
6) the summary of projects and costs (Appendix 2)

1.8 Summary

In summary, this cluster programme is about changing the reality and the image of the regional economy. It delivers many of the priorities of the West Midlands Economic Strategy, and over time it will have a significant impact on Gross Value Added. It works towards modifying the underlying shape of the economy. Working with businesses and building on existing regional strengths it will create sustainable competitive advantage.

2. Cluster Plans – Executive Summary

2.1 High Value Added Consumer Products – net$^{\infty}$ infinity

The High Value Added Consumer Products Cluster supports companies from the furniture, jewellery, carpets, ceramics, leather, glass, clothing and textiles trades and the designer maker community. These sectors have in common that they are undergoing major structural changes, but still make significant contributions to the regional economy and employment.

This cluster comprises approximately 2,500 companies and employs some 48,400 people in the West Midlands. The employment figures in this cluster are forecast to fall, partly due to competition from mass production in low wage economies. However, the West Midlands continues to be home to many established companies, leading brands and also a pool of successful designer makers, including a stream of new design talent entering the labour market from our universities.

The vision for the cluster is for the region to be a world renowned centre for design rich consumer products.

The future success of this cluster depends on the effective exploitation of high value niche markets, based on the primacy of product design, innovation, quality and style. The strategy is therefore to foster the development of companies that recognise design as central to business success. The renaming of the cluster as net infinity and the development of the **net$^{\infty}$ infinity** brand is the first step in the evolution of a sustainable, visionary and design-rich cluster defined by business culture, not raw material, product type or sector.

The key themes for this cluster are:

net$^{\infty}$ infinity Centre - established as a facility to co-ordinate and consolidate existing sector initiatives and activities and develop effective sector representation within the cluster

Holistic design – promoting design as a key business driver and facilitating its adoption to improve profitability and growth. Supporting co-operation and collaboration between companies and designers in the region.

Enterprise – Facilitating support for new and existing companies, exploiting business opportunities to gain new leads, access to new customers and markets, winning new sales and safeguarding existing sales.

Training and skills – Reducing skills gaps and shortages and developing initiatives that address design, enterprise, innovation and skills needs.

Marketing innovation – Identifying new market opportunities through Foresighting, and assisting companies to develop a vision for their future exploitation.

2.2 Screen Image & Sound

This cluster includes all screen media - TV, Film, video, interactive games, e-learning, music, radio and photography. The cluster's focus is on the creation of innovative digital content for education and entertainment.

The mean of available data indicates a cluster workforce of 21,000 generating a turnover of £1.4bn. The industries are nationally and internationally focussed, with the converging digital marketplace offering opportunities to reach new global audiences.

The Region is home to 2 national broadcasters, 4 top 100 TV producers, world renowned popular, classical and ethnic musicians, hubs for the leading players in the UK radio industry, market leaders in the games and animation industries and internationally acclaimed digital image events.

The vision for the cluster is to be a leading region for integrated innovative creative digital content.

The cluster will achieve this through networking and knowledge transfer, diverse talent development and retention, showcasing and marketing and the exploitation of converging digital platform.

The action plan seeks to integrate cluster industries through digital technology and to develop capacity to grow the Region's content creation industries to achieve critical mass by 2010.

The cluster's prime role in the next 3 years will be the development and maintenance of an overarching network to facilitate and integrate partnerships between cluster industries; innovation, research and learning institutions; and investment vehicles.

The network and partnerships will be the tools to deliver the various projects that support the cluster objectives:

1. catalyse and **grow the digital content industries** in the West Midlands
2. to enable new entrants to gain **equal access** to cluster industries and to retain talent in the region
3. to support effective, innovative and well targeted opportunities for development and **learning** for business, professional and creative craft skills relevant to the cluster
4. to develop new and **innovative routes to market** business models specifically for digital industries
5. to develop initiatives to **showcase, market and promote** the Region's creative screen image and sound products

In the next three years the cluster will establish a leading position in the emerging field of serious games, melding games technology and creative entertainment techniques for educational applications in fields such as medical technology, heritage and law and order.

2.3 Environmental Technologies

The Environmental Technologies Cluster covers all sub-clusters of the environmental industry and ranges from air pollution control, waste management and recycling to environmental consulting, energy management and low carbon technologies. This cluster employs around 29,000 people in the Region, with a forecast growth of 5% per annum to 2010. This growth is driven by the expansion of environmental legislation.

The vision for this cluster is for the Region to be internationally recognised for the supply and use of Environmental Technologies products and services by 2010

The Environmental Technologies marketplace is complex, dynamic and challenging. However, the West Midlands has a number of substantial strengths in terms of its wide range of manufacturing capability and technology companies with relevant expertise. However, weaknesses are centred on the skills agenda, and on weakness in innovation, critically, the need for pressured companies to see and to grasp opportunities.

In the next 3 years, this cluster has decided to centre its efforts on the renewable energy and waste markets. The Plan seeks to maximise regional strengths and address weaknesses by including:

- strong support for **innovation** through business support and direct innovation projects;
- facilitating an active regional market through pioneering **demonstrator projects** in renewable energy and waste areas.
- effective and proven **market linkage** measures to facilitate companies in the Region coming to market in a convincing manner. This has been successfully piloted in the WindSupply and Industrial Symbiosis projects.
- Identifying **global opportunities** and supporting regional suppliers to seize the opportunities
- building strong **networks** both between partners and between companies as a key mechanism for progress.
- Increasing regional competitiveness by **recovering waste** and re-using it as input material with a value (e.g. waste cooking oil into bio-diesel)
- Provision of **skills** infrastructure to fill skills gaps and support development of management teams
- Effective linkages to wider strategic agendas at regional and national level, in particular that for Sustainable Production & Consumption, where the ET Cluster will take responsibility for funding allocated under the Business Resource & Waste Programme.

2.4 Building Technologies

Building Technologies directly contributes over £6 billion and 250,000 jobs to the regional economy and as such is a very important, and growing, cluster for the region.

The cluster is at the very core of the physical and social regeneration of the region and creates major opportunities for jobs and improvements in quality of life.

The Building Technologies Cluster is undergoing rapid transition, from a low technology, site-based industry to a dynamic provider of manufactured built environments. The West Midlands with core strengths in building materials, design and manufacturing is well placed to lead this transition.

The vision for this cluster is for the Region to be an international leader in sustainable building materials, sustainable building products and design-led, manufactured building solutions.

The focus of this plan is in three areas:-

1. Implementing continuous improvement in the industry though "**Constructing Excellence**" - focused programmes in innovation, best practice knowledge, productivity and engagement. Evidence from demonstration programmes demonstrate that this can deliver 10% savings on the cost of the Region's capital building programme.

2. Stimulating **Off-site manufactured building solutions** – The move to factory-made solution builds on the Region's comparative advantage in design, manufacturing and engineering, and addresses many of the issues that have plagued the construction industry, from overspends and late delivery to skill shortages and social inclusion. Since the UK is currently not at the forefront in this market, we will encourage inward investment as part of the cluster.

3. Using the Region's strengths in materials and product development to position the West Midlands as an international leader in **Sustainable buildings.** Buildings account for over 50% of CO_2 emissions and market demands are combining with increasing legislation and regulation for more sustainable use of resources including land; water and energy. These will be leading drivers for building technologies over the next three years.

2.4 Aerospace

With total employment in the Region estimated at 21,700 from 298 businesses, aerospace is a key cluster in the future economic development of the West Midlands. Short and medium prospects for the cluster are good, and long term forecasts call for continued expansion of the civil aerospace with jobless growth.

The Midlands Aerospace Cluster is specialised in the systems that power and control aircraft, and the specialist metal and composite materials these systems are made of. A number of general engineering firms also support aerospace.

The vision for this cluster is for the Region to be host to an internationally recognised, sustainable aerospace industry, creating wealth and opportunity for the West Midlands.

Aerospace is a truly global industry and in order to compete in the future the West Midlands region needs to offer innovative solutions to technology challenges facing the industry.

In the longer term the creation of Centres of Technology Excellence will build on the Region's core competency – systems that power aircraft, and achieve national and world leadership in the selected areas of technology excellence – more electric control systems and high temperature materials, as well as in other areas.

In the medium term, support for the cluster falls under the following five themes:

1. **Business Development** - strengthen the Region's position in global markets and increase market share. I.e. through increased participation in new or expanding major aerospace programmes and exploiting inward investment opportunities.
2. **Technology** - Attract and retain high levels of research and development, innovation and technology to keep the cluster at the forefront of global opportunities. I.e. attracting and retaining leading edge aerospace programme activities
3. **Best practise** - Attain world competitive standards for productivity, quality, cost and delivery (QCD), and process excellence – to justify retention or attraction of a wide range of activities. I.e. compete globally through high-level skills and innovation in business processes.
4. **Skills** - Create and maintain a trained and flexible workforce to meet the needs of the West Midlands Aerospace industry in the 21st century.

From these objectives flow a number of new support activities covering:

Business Strategy
Developing Market Consortia – bringing companies together to bid collectively to the prime manufacturers
Technology Exploitation – a network of experts helping companies to exploit new technologies and processes
Supply Chain Improvement
Skills

2.5 Automotive

The West Midlands is the UK centre of gravity of the automotive industry with a 33% share of vehicle output and the strong presence of vehicle manufacturers (OEMs), including several volume premium brands and 9 niche vehicle makers. There are estimated to be over 1500 dedicated automotive suppliers in the region, including 17 within the first supply tier and well-developed lower supply tiers. There is also a significant R&D presence, including several independent and OEM-owned facilities.

The development of an overall vision for cluster growth will require the consensus of a strategic body fully representative of the regional automotive industry. Establishing such a body as part of a broader regional strategic collaboration is the first priority in the cluster action plan. In the absence of such a body, the current vision for AWM intervention within the sector is provisional.

The visions is to support the West Midlands automotive industry in achieving global competitiveness and productivity - through promoting innovation, investment, collaboration and workforce development'.

The strategy has 5 principal objectives:

- Encourage enterprise & investment
- Improve manufacturing competitiveness
- Promote research, technology & innovation
- Develop the regional skills base
- Create the conditions for cluster growth

From these objectives flows an action plan which comprises a total of 22 funded interventions, all of which 'serve' the cluster. Of these 22 interventions, 3 are new cluster projects and a further 5 are elements of an extended Accelerate programme. The proposed cluster projects are as follows:

- Promoting regional strategic collaboration
- Niche vehicle automotive park - 'Motor City'
- Cluster growth & mapping studies

Motor Sport is presented – as a separate issue – in Appendix 1. The planned intervention is significant participation in the National Motorsports Programme, to influence this programme to support the regional industry and also permitting the regional industry to influence the greater national agenda for regional benefit.

At the time of compiling this report, MG Rover was in administration. This 3-year strategy will be subject to major review in mid-2005 when the impact of this development has become clear.

2.6 Rail

The Rail industry cluster comprises those sectors that undertake 'provision and maintenance of services, goods or infrastructure for the transportation of passengers or freight by rolling stock'.

The West Midlands is at the hub of the UK rail network and the rail cluster includes businesses active in all aspects of rail services in the UK and global markets. Its unique points include a presence in depth of globally significant rail consultancies and service providers, a national centre for rail systems development, significant maintenance and infrastructure companies as well as a world-class component supply base feeding rolling stock and infrastructure industries. It suffers from the problems of fragmentation caused by privatisation, a risk and technology-averse culture and a severely ageing demographic. To fuel development these factors need to be addressed and the cluster needs to be brought together to extract maximum benefit from future investment in rail nationally and globally.

This plan capitalises upon the unique experience gleaned from being the first nation to privatise its rail industry. The lessons learnt making this operate successfully are vital to numerous other nations seeking to follow this path. The plan is an ambitious yet focussed programme designed to capitalise upon proven strengths and expertise whilst augmenting the industry base with technology, skills, strong networks and opportunity.

The vision for this cluster is for the West Midlands to be recognised as the place that really understands and can deliver innovation and change within global rail markets.

This vision will be delivered through the following objectives:

1. Skills recruitment and retention
2. Improving Industry Competitiveness
3. Promoting research, technology & innovation and improving takeuUp
4. Promoting collaborative agreements, networks & enterprise
5. Promote and develop the capability in the West Midlands

The Plan comprises key projects including:

- A business-focussed trade association to represent and promote the industry and cut through barriers to build an industry fit to reach its full potential
- A strong technology and industry 'heart' pulling together research, development support and entrepreneurial spirit via technology transfer between research establishments and industry
- An integrated International business development programme with quality and appropriate support
- A comprehensive skills programme with quality provision to track the industry as it progresses and develops

2.7 Business and Professional Services

The Business and Professional Services Cluster comprises industry sectors ranging from accountancy, banking and surveying to financial and legal services and marketing services. As a cluster, it generates wealth and added value but also underpins the sustainability and growth of other key regional clusters, through provision of expert advice and business support.

The cluster is estimated to comprise 28,400 establishments and employ 90,200, with an expected growth of 14% to 2010. Now seen as the fastest growing cluster in the region, the development of the B&PS Cluster has become strategically important for the region through the expertise and knowledge it can offer to all branches of the economy.

The vision for this cluster is for the West Midlands to be the premier region for doing business with Professional Services of Excellence.

The main aim of the business plan is:

> **Business Growth** – recognising and exploiting strengths and opportunities for winning business, locally, regionally, nationally and internationally

This main aim is supported by the following objectives:

1. **Skills** – through education and training, to raise individuals' aspirations and attainments in order that B&PS firms have (and continue to have) access to people with the right **skills** required to deliver success in their business
2. **Innovative Culture** – encouraging service improvement through new ideas technology and working practices, thus encouraging firms to develop their reputation for 'excellence'.
3. **Connectivity and collaboration** – linking partners (public and private) and projects to add more value through working together and sharing information. This is particularly important for smaller firms who cannot provide the range of services offered by some of their larger competitors.
4. **Marketing** – creating and promoting the West Midlands' image for excellence in Business and Professional service. At present, marketing is regarded as a competitive weakness by many B&PS firms – this weakness needs to be addressed.

The 3-year action plan has been designed to lay the foundations for addressing these issues.

2.8 Food and Drink

The Food and Drink Cluster includes some 2,600 businesses in the Region and employs approximately 66,000 people directly, with a further 100,000 or more in the wider supply chain. The ClusterBusiness Plan aims both to stimulate the further establishment of new businesses that will create added value products and to support the development of the more established businesses, so that they can expand and generate high value jobs within the region.

The West Midlands already has an excellent inward investment track record for Food and Drink companies, and hosts a number of major brands. The cluster shows strong productivity and benefits from a diverse group of specialisms.

The vision for this cluster is for the Region to develop businesses that focus on adding value to food and drink products and develop sustainable processes, technologies and new products.

This plan seeks to address the main needs of businesses in the Food and Drink Cluster through:

- Developing cluster **networks** are developed, helping companies to access suitable, specialist business support in order to improve their innovation, address the skills gaps and maximise the many opportunities in the cluster, ranging from the growth of markets for convenience food and ethnic food, food-based tourism in the region (i.e. Ludlow and the Balti triangle) and the drive for sustainable food procurement.
- Stimulating the provision of '**food production ready' premises** for new businesses
- Promoting **shared selling and distribution** to create affordable access to markets
- Providing **market intelligence** to help companies maximise market opportunities and promote new and non-food products and services
- Promoting **sustainable food procurement** and facilitate business take-up
- Promoting the new **agri-environmental schemes** to secure **environmental benefits** from agriculture
- **Promotion** regional and local food
- Promoting **sustainable waste management** in the farming and food industries
- Developing rural and farm based **tourism and recreation**

2.9 Tourism and Leisure

The Tourism & Leisure industry is vital to the economic well-being of the West Midlands. In 2001 there were approximately 124 million visits to the region, generating £4.8 billion, and supporting 305,000 employees across 28,000 businesses. This Region is particularly strong in Business Tourism, primarily driven by the NEC and the Region's central location. In Leisure Tourism, among hundreds of attractions, we have the world-

2.10 Manufacturing

Manufacturing is, and will continue to be, of huge significance to the West Midlands economy. In 2015, the West Midlands manufacturing is expected to contribute 20% of the regions Gross Value Added (GVA), the highest of any other UK region and while direct manufacturing employment is likely to continue to fall, the region's manufacturing economy will have changed from one that competes on cost to one that has unique innovation and technological strengths in key technology areas embedded within its supply chain.

As globalisation has made access to raw materials and other traditional factors of production and sources of comparative advantage ubiquitous, and knowledge become the main source of competitive advantage. If our regional manufacturers are to survive in the long term, they must compete in the knowledge economy. This Cluster Plan seeks to get traditional industries to change the way they do business in order that far more regional manufacturers can match the success of the best.

The vision for this Cluster is for the West Midlands to be known for its excellence in translating science, technology and specialist knowledge into the manufacture of successful products and services.

Specifically the plan seeks to:

1. Embed the knowledge from a number of key identified technology areas within the regional supply base, .e.g. fuel cell technology;
2. Facilitate the generation and transfer of such knowledge through demand-led collaborations, e.g. commercialisation of a novel manufacturing process (i.e. Net Shape HiPing, Metal Matrix Composite Materials;)
3. Develop regional support around the area of product design and innovation; e.g. the Product Innovation Consortium;
4. Engage manufacturers and the Region's NHS Trusts for the development of innovative procurement and manufacture in medical technologies;
5. Leverage both knowledge and resource from a broader range of regional and non-regional sources, e.g. DTI Funding, FP6, etc;
6. Maximise the marketing and publicity opportunities for the above.

Key prerequisites to the success of the plan include:

Having a unified image, focused on the Region's success in innovation
Capitalising on knowledge from key global manufacturers players in the region;
Providing a clear road-map for the engagement of companies;
Closer collaboration between Higher Education, EIs, RTOs, Research Bodies, and Industry;
A more flexible and imaginative way of utilising intellectual property rights and their management, by both knowledge providers and firms

2.11 Information and Communications Technology (ICT)

The ICT Cluster employs some 57,000 people in 3,000 firms, the majority of which are located in the south east of the region, delivering £4 billion turnover.

ICT is important to the West Midlands for two reasons: first, output from firms within the sector accounts for a significant proportion of regional output; and second, as an enabling set of technologies, ICT supports almost all sectors of the economy. Hence, the creation of a dynamic and successful ICT Cluster in the West Midlands will have a substantial knock-on benefit for the regional economy as a whole.

The vision for this cluster is for the West Midlands to be recognised as the 'Digital Foundry of the World'

The ICT cluster works to enable the region to become renowned for its R&D and innovation in the digital industries.

The ICT cluster has identified four strategic directions, which forms the basis for the existing funded projects and is the framework against which new projects are being developed and assessed.

1. **create a networked business community**
   Through support to the West Midlands IT Association (WMITA), bringing together existing sub-regional IT associations and WM Digital. In addition, industry collaboration is encouraged through the COG activities, the ICT cluster website www.wmictcluster.org and the annual Cluster Forum.
2. **manage the transition from manufacturing to services;**
   Through advice, consultancy and high-level training to SMEs around the business benefits of implementing ICT and maximising use of the latest technologies.
3. **focus on a small number of sub sectors in which there are particular strengths in the region;**
   Currently, these include the Photonics sub-cluster and the wireless and mobile technologies, and more work is proposed to identify sub-clusters in the area of sensor systems and telematics applications.
4. **exploit the strong knowledge base in the Region's universities.**
   Promote links between the industry and the wealth of intellectual expertise in the Region's universities and research centres. Existing projects include the CERCIA project to apply expertise in computational intelligence to industrial problems, and OpenAdvantage, which assists in the development, and take-up of Open Source software.

2.12 Medical Technologies

The Medical technologies cluster is defined as comprising businesses that operate in the market for any instrument, apparatus, material or other article, whether used alone or in combination, including the software necessary for its proper application intended by the manufacturer to be used for human beings for the purpose of: Diagnosis, prevention, monitoring, treatment or alleviation of disease, injury or handicap, or the promotion of good health; Investigation, replacement or modification of the anatomy or of a physiological process, Control of conception, and which does not achieve its principal intended action in or on the human body by pharmacological, immunological or metabolic means, but which may be assisted in its function by such means.

The cluster recognises the importance of the supply chain which underpins the areas identified above and will provide support to this where appropriate. Similarly, the cluster appreciates the role played by the NHS, particularly in respect of its value as a major purchaser of products and services.

A Medical Technologies Cluster research project, will be undertaken during the early part of 2005-06, to provide a picture of the cluster across the region. It will outline the cluster's current strengths, areas for development and potential opportunities which should be explored. Companies operating in this cluster will be invited to participate in the research project. Their opinions will help to inform the development of the longer-term strategy. Currently, the COG has agreed an interim strategy for projects in 05/06.

In the longer term it is clear that the areas which the COG will wish to focus on will include:

- Access to markets – trying to ensure that companies are supported in their efforts to develop new opportunities, both in the UK and internationally.
- Working with partners to develop the 'regional offer' – all the expertise, facilities and strengths of the cluster in the West Midlands need to be linked in order to allow the region to compete successfully at a national or international level.
- Simplifying the support available to companies – avoiding duplication and ensuring that agencies delivering support have a clearly defined role.
- Skills issues – ensuring that where companies develop new products and/or new markets, they have a skilled workforce to support this.
- Innovation – helping individuals and companies to commercialise their good ideas. The COG recognises that this cluster offers significant potential for diversification and that companies will require support to move into medical technologies.
- Foresighting – identifying the emerging trends in healthcare and medical technologies and sharing this information with partners and companies.
- Procurement – working with the NHS and other partners to identify ways in which some of the existing barriers can be removed and new ways of doing business can be taken forward.