



Llywodraeth Cymru
Welsh Government

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SMARTCymru

Research, Development and Innovation

Driving Innovation



Ewrop & Chymru: Buddsoddi yn eich dyfodol
Cronfa Datblygu Rhanbarthol Ewrop
Europe & Wales: Investing in your future
European Regional Development Fund

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Overview of Support Available

Support is available for all sizes of business and for all phases of a research and development project.

| Research & Development & Innovation Support (RD&I) | | | | |
|--|------------------|-------------------|------------------|----------|
| R&D Phase | Small Enterprise | Medium Enterprise | Large Enterprise | Limits |
| Technical and Commercial Feasibility | Up to 75% | Up to 75% | Up to 65% | £15,000 |
| Industrial Research | Up to 70% | Up to 60% | Up to 50% | £100,000 |
| Experimental Development | Up to 45% | Up to 35% | Up to 25% | £200,000 |
| Exploitation | Up to 50% | Up to 50% | Up to 50% | £20,000 |

overview

Stimulating Success

No matter what the size and scope of your company, developing new products and processes and successfully bringing them to market stimulates success.

The rewards of successful research and development (R&D) can be significant. It can open up new markets, boost sales and increase profitability. But it is also a risky business. R&D requires investment in resources, people and expertise. It's not a 'quick-fix' and can take considerable time to fully develop an idea and bring it to market. And R&D can be costly.

For businesses operating in Wales, help is at hand. Through the Welsh Government's RD&I (Research, Development & Innovation) team, funding and support is available at all stages of a research and development project.

Our support is aimed at small and medium-sized enterprises (SMEs), as well as start-up businesses. We provide financial support and innovation advice. We direct you to specialists and help you create connections. In short, we support you by sharing the risk.

Supporting you every step of the way

Support is available for all phases of a research and development project, from initial feasibility to market exploitation. Here's an overview of how we can help:

Technical and Commercial Feasibility phase – helping you to investigate and assess the technological and commercial viability of transforming innovative ideas into new products or processes.

Industrial Research phase – enabling you to undertake practical research to acquire new knowledge and develop a basic working model of a new product or process.

Experimental Development phase – supporting you to implement the results of industrial research and develop a pre-production prototype.

Exploitation phase – to assist you with the costs of launching a new product or process on the market.



Saving Car Manufacturers Millions – We Predict

Swansea-based technology company, We Predict, provides predictive analytics to some of the world's largest companies.

The company secured funding from the Welsh Government to investigate the feasibility of creating an advanced Enterprise Database based application. This concept had the potential of saving major automotive manufacturers millions of pounds in warranty costs.

The resulting feasibility report enabled the company to continue development. Further funding from the Welsh Government for Experimental Research, resulted in the successful launch of We Predict's innovative Indico reporting tool.

technical and commercial feasibility

Phase 1: Technical and Commercial Feasibility (TCF)

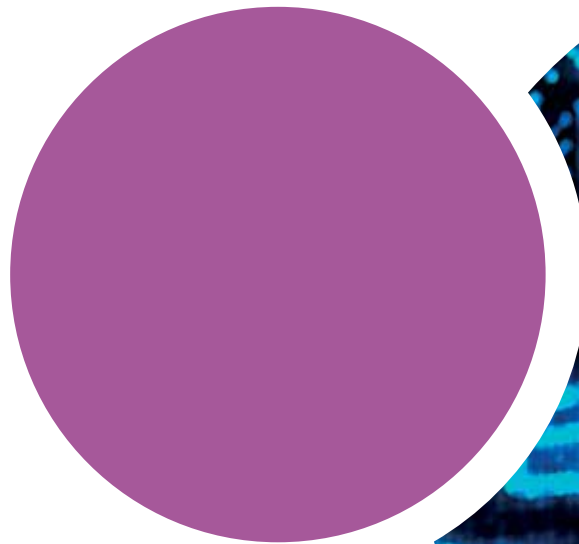
This is the starting point for most R&D projects. Funding support at this phase aims to help you investigate and assess the technical and commercial viability of the concept.

This could involve initial market assessment, patent checks and Intellectual Property Rights (IPR) validation. It may also involve desk research and calculations to establish if the concept is worth pursuing further.

The result of this phase is a technical and commercial feasibility report. The feasibility report would be used as evidence in any application for funding at subsequent stages of the project.

Typically this phase takes between one and six months.

Funding is available for up to 75% of the costs, up to a maximum of £15,000.

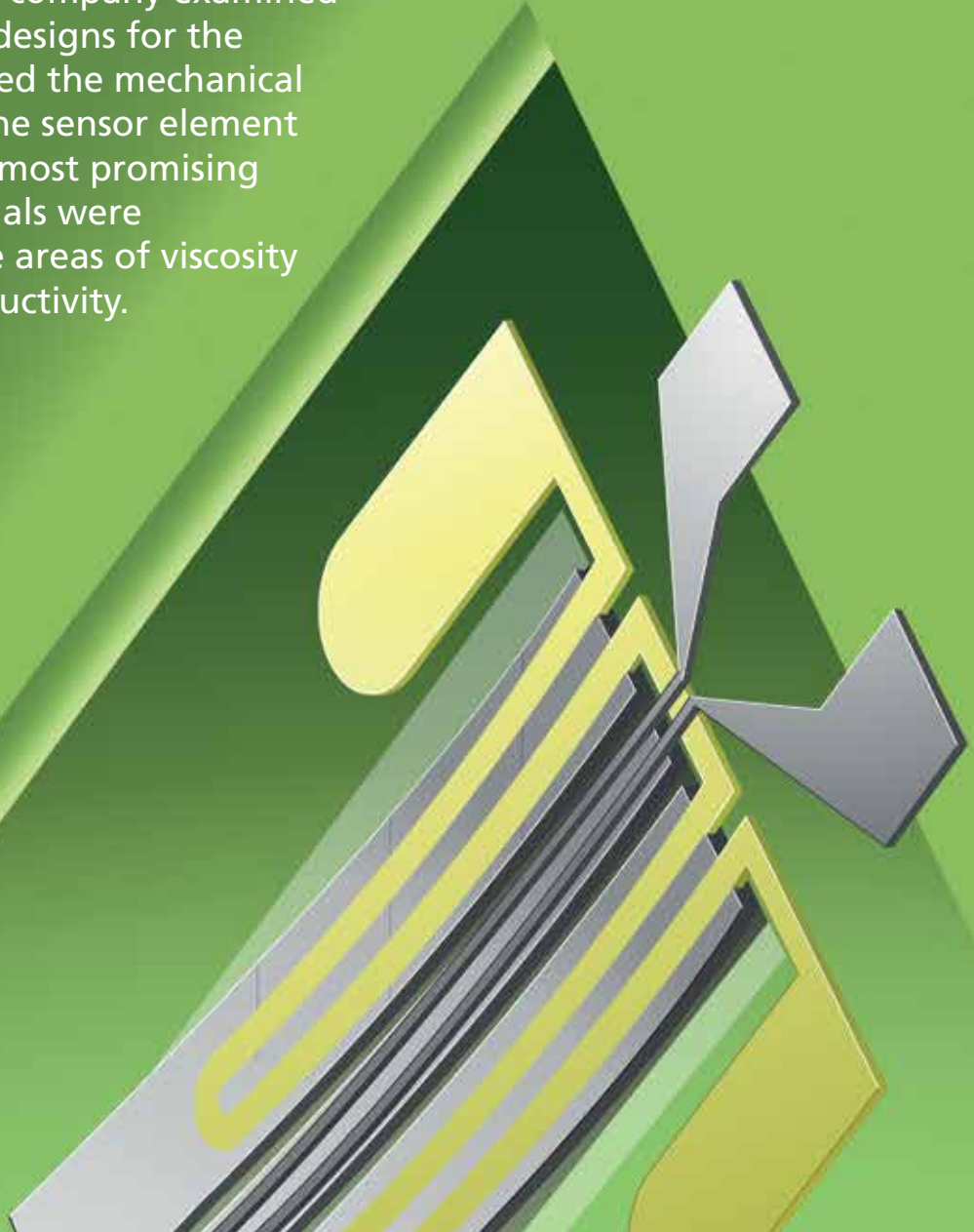


Revolutionising Home Treatment – Microvisk Ltd

St Asaph-based Microvisk has developed a medical device that is set to revolutionise the management of patients with blood disorders.

Microvisk worked closely with the Welsh Government as it developed the product for global markets. Initial funding was provided for Industrial Research. In this phase of development, the company examined several potential designs for the device and analysed the mechanical stresses likely in the sensor element to determine the most promising design. Further trials were undertaken in the areas of viscosity and thermal conductivity.

This initial support enabled Microvisk to access further Welsh Government R&D funding, as well as significant funding from both Finance Wales and the private sector. Microvisk are currently undertaking US and European clinical trials and have plans to establish a US operation very soon.



industrial research

Phase 2: Industrial Research (IR)

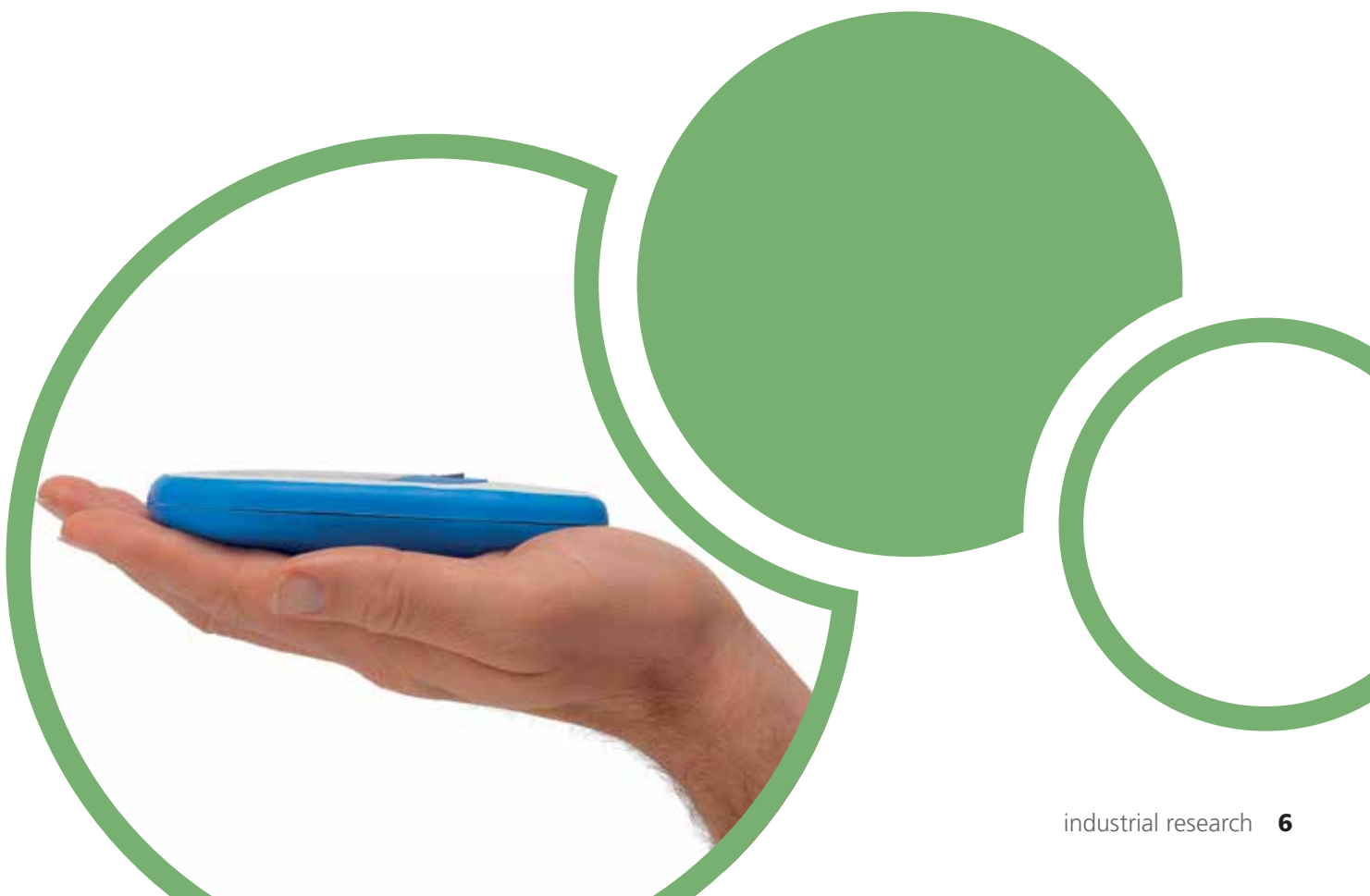
Having determined the viability of the initial concept at the feasibility phase, funding and support is available to help you test your ideas through Industrial Research.

The Industrial Research phase involves practical planned research or critical investigation aimed at gaining fresh scientific or technical knowledge to help you develop a new or significantly improved product, process or technology.

The outcome of this phase is typically an early bench-top or basic working model. This model can help to demonstrate that your concept is a significant technological advance and is commercially viable. It could also be used as the basis for an application for support at the next phase of the development process.

Typically industrial research takes between three and 12 months. You must demonstrate that you have already undertaken a feasibility report.

Funding is available for up to 70% of the costs, up to a maximum of £100,000.

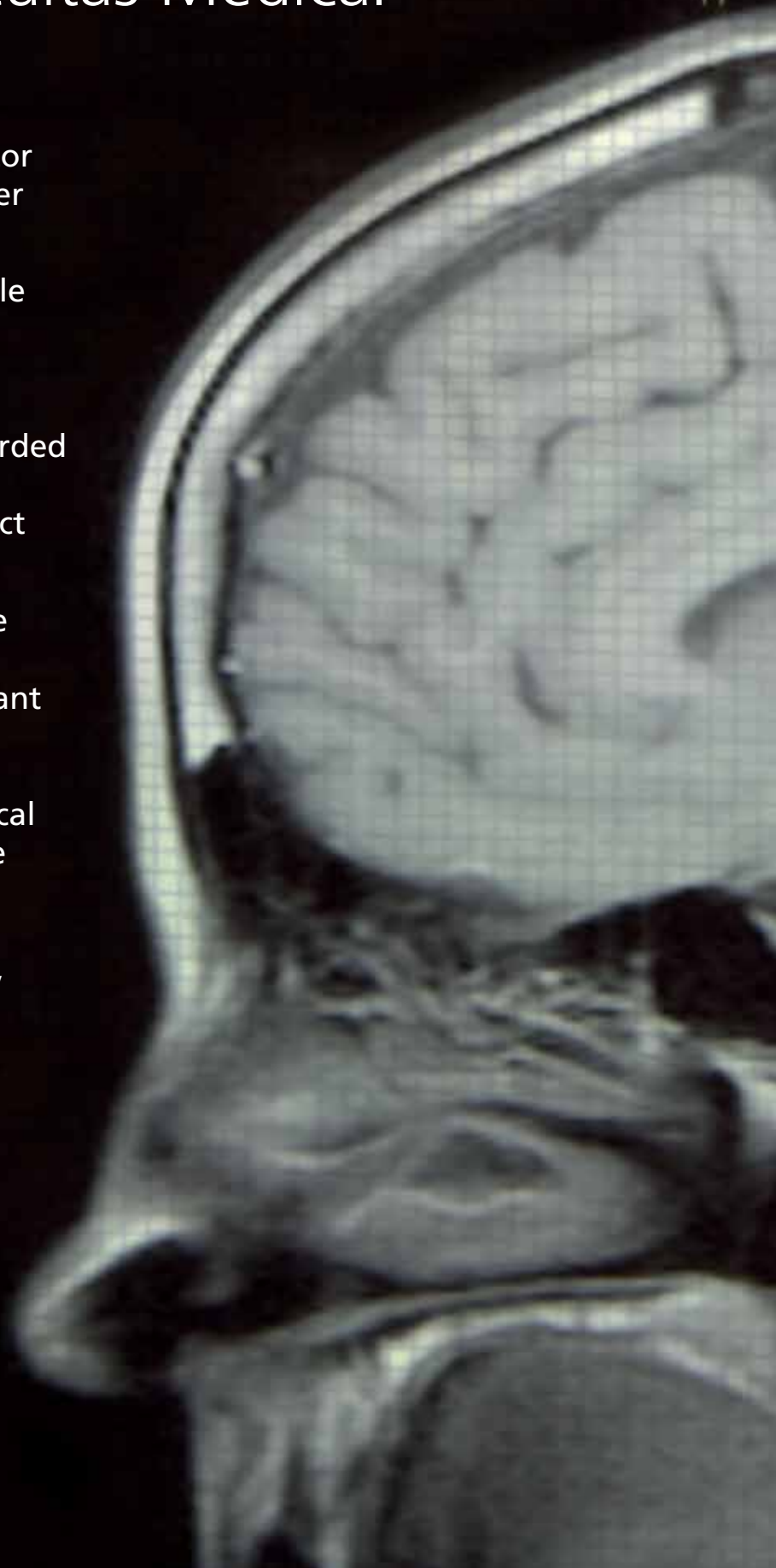


Letting Us “See” the Inner Workings of the Body – Acuitas Medical

Swansea-based Acuitas Medical has developed the potential to change the way the medical sector diagnoses and monitors a number of important diseases.

The company has created a simple and highly effective MR-based technique for the diagnosis and monitoring of bone disease and cancer. Acuitas Medical was awarded funding for the Experimental Development phase of the project from the Welsh Government.

Dr Timothy James, Executive Vice President and Chief Technology Officer for Acuitas said, “This grant funding, in combination with the equity funding from Finance Wales, allows us to conduct clinical studies to demonstrate the value of our unique software tools for diagnosis for a wide range of diseases including organ fibrosis, angiogenesis and bone disease.”



experimental development

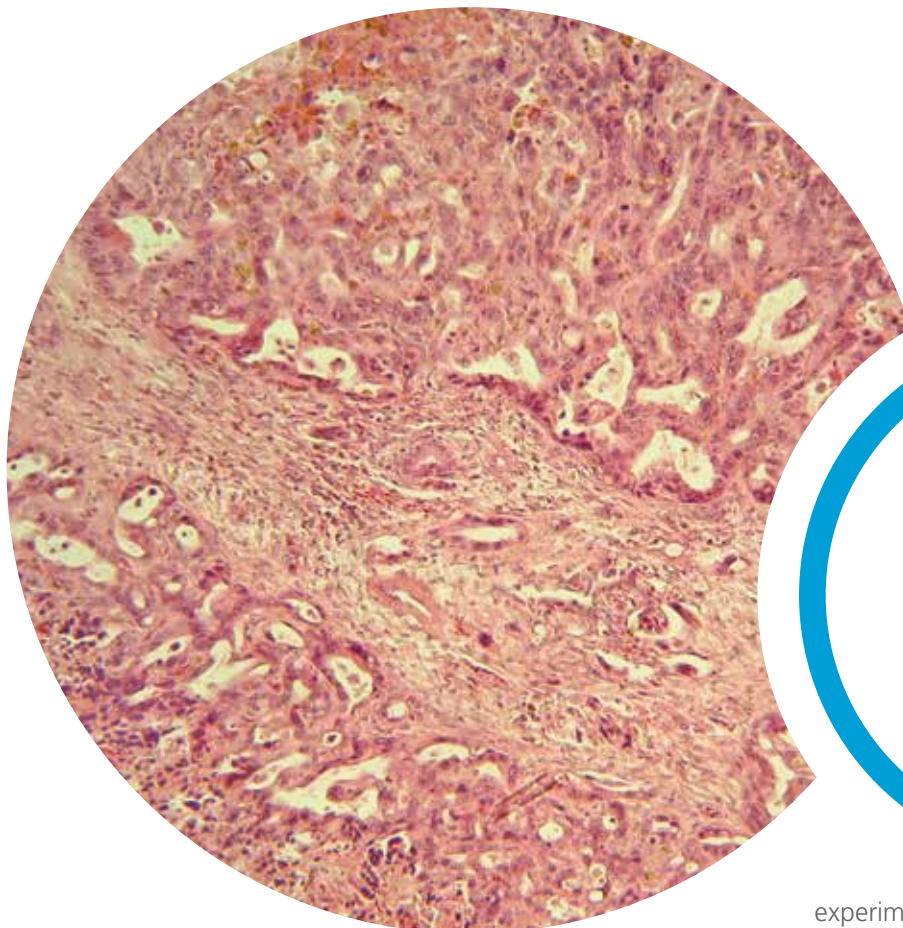
Phase 3: Experimental Development (ED)

Funding support at this phase aims to help you use the results of industrial research to advance from a proven model to the development of a pre-production prototype.

The Experimental Development phase results in the completion of an advanced prototype that demonstrates a significant technological advance and confirms commercial viability. The prototype is not intended to be used commercially but to enable initial demonstration or pilot projects. This phase does not include the routine or general changes made to products, production lines, manufacturing processes, existing services and other operations in progress, even if those changes may represent improvements.

Typically the Experimental Development phase lasts between six and 24 months. To qualify for funding, you have to demonstrate the results of your industrial research.

Funding is available for up to 45% of the costs, up to a maximum of £200,000.



Pioneering Newport Company – Abriox Ltd

Abriox has taken its innovative ideas and developed them into internationally renowned products.

In 2005, Abriox received a TCF grant to do market research to assess the viability of new gas and fuel pipeline monitoring systems. Neil Summers, Abriox's Managing Director, explains, "It helped reduce our risk because if our research couldn't identify a promising potential product, we wouldn't lose too much money."

As a result of the initial research, Abriox adapted their product ideas, having identified demand for an electronic instrument which would monitor corrosion in metal pipelines.

In 2006 with funding from the Welsh Government for Industrial Research, Abriox recruited two engineers to test the various

hardware configurations, optimise the wireless communications scheme and write the PC user software.

Following successful completion of this phase, Abriox received further funding from the Welsh Government to undertake trials with petrochemical and gas companies. Prototypes of the remote monitoring system units were exposed to realistic field conditions. This enabled the company to make final refinements before the product was launched onto the market.

In 2007, Abriox received a final phase of Welsh Government funding to market the products and publicise them at the major trade shows.



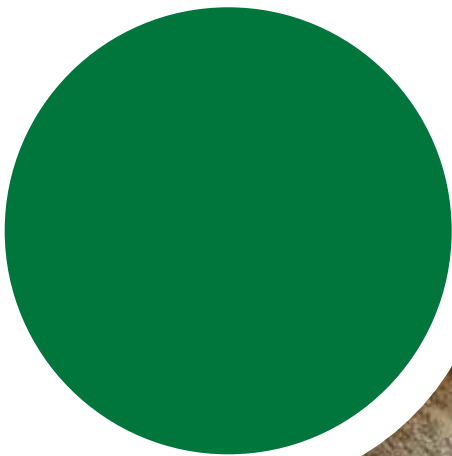
exploitation

Phase 4: Exploitation

Funding support at this phase aims to assist you with the costs of launching the product or process in the marketplace. This can include marketing, publicity, advertising, publication of sales literature, trade fairs and product certification. It does not include the development of manufacturing processes or tooling.

Typically this crucial Exploitation phase can last up to 12 months. Funding is only open to you if you have already developed a prototype and have received support from us during at least one of the previous development phases.

Funding is available for up to 50% of the costs, up to a maximum of £20,000.



next steps

Providing Financial Support and Innovation Advice

From the initial idea to implementation of the final product, the Welsh Government can help to drive your business success.

As well as access to funding for business innovation, advice and support is available from our Innovation Specialists. Based throughout Wales, the Innovation Specialists can identify how your business can become more innovative and help you:

- Create and commercialise new products and processes
- Increase efficiency in manufacturing through technology and process improvement
- Introduce design for new product development and manufacture, and
- Identify, protect and exploit your intellectual property.

RD&I Funding – Who can apply

RD&I support is available to all innovative businesses. You must already be operating in Wales and projects must be carried out in Wales. Those who apply are not usually in a position to carry out more than one research and development project at the same time.

Collaborative projects can be undertaken by two or more separate, but not linked, companies. In this case, all applicants must have a base in Wales and at least one of the applicants must be an SME.

Software projects must have a significant technical element i.e. a development that will produce a technical effect. This must include innovative programming methods or production of an innovative application or service.

Next Steps

The first step is to contact the Innovation RD&I team to request a full information pack and application form.

Our team can help you determine if your project is eligible and which phase is appropriate. You will then need to complete an application form. The form does not require a lot of information, but should focus specifically on the R&D project. The Innovation RD&I team can help you with your application form.

Contact the Innovation RD&I team now on **03000 6 03000**, email innovation@wales.gsi.gov.uk or visit business.wales.gov.uk

