

BOOST YOUR COMPETITIVENESS WITH **PUBLIC KNOWLEDGE**

FUNDING OPPORTUNITIES FOR
PUBLIC-PRIVATE PARTNERSHIPS

1. RESEARCH
& DEVELOPMENT

2. MOBILITY

3. EXPERTISE

4. SHARED
INFRASTRUCTURES



Yves Elsen

Marco Valentiny

FOREWORD

The role and importance of Public-Private Partnerships (PPPs) has increasingly been recognised by companies and governments as essential to the development of competitiveness.

In Luxembourg, both the Ministry of the Economy and Foreign Trade and the National Research Fund (FNR) are committed to supporting and stimulating PPPs through targeted state aids and support schemes. Luxinnovation, the National Agency for Innovation and Research, is in charge of promoting these funding measures towards the private sector and providing support to companies wishing to participate in PPPs.

This is why the FNR and Luxinnovation have joined forces to promote PPPs in Luxembourg through their various funding instruments and support measures. A first step into that direction is this brochure, which gives an overview of funding opportunities available, exemplified with actual cases of successful cooperation in Luxembourg.

Together we are dedicated to mobilising resources in order to act as a catalyst for your competitiveness.

Yves Elsen
President of the National
Research Fund

Marco Valentiny
President of Luxinnovation

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RESEARCH & DEVELOPMENT

PUBLIC-PRIVATE R&D PROJECTS STRENGTHEN YOUR COMPETITIVENESS

You have an innovative idea but hesitate to follow through due to concerns about feasibility. You might be close to achieving the product, process or service you want, but need more development. Alternatively, you may be some way off making a final breakthrough, so you will need research to build on your knowledge base. Or, you might have an idea that does not immediately lead to a commercial opportunity but could be key to facing long-term strategic challenges.

The solution to all these issues might be found by collaborating with scientists from the public research institutions in Luxembourg.

With the support of Luxinnovation, companies can benefit from funding of the Ministry of the Economy and Foreign Trade for the implementation of applied research and development projects in view of resolving short- or mid-term problems.

Through the funding support of the CORE programme of the National Research Fund (FNR), public research institutions are able to collaborate with Luxembourg-based companies in fundamental research projects to address issues of a more long-term nature.

The result is greater knowledge and a higher competitiveness for your business.

How **GOODYEAR** addresses its long-term challenges with the help of the FNR's CORE programme

“The fusion of the different basic abilities of Goodyear and the University of Luxembourg is a great added value for the achievement of the project objectives.”

Dr Georges Thielen, Manager External Science and Technology,
Goodyear Innovation Center Luxembourg

Finding out how tyres respond under ABS braking conditions is one of the main priority projects of Goodyear Innovation Centre Luxembourg. In May 2010 the tyre maker's R&D arm began its work on a three-year project with the University of Luxembourg to conduct fundamental research into how the various components of tyres react when under this particular stress.

Thanks to the public-private partnership, the University of Luxembourg was able to dedicate the equivalent of one and a half PhDs and Postdocs to work exclusively with Goodyear. The synergy between the latest academic and business knowledge coming together will produce added value greater than the sum of its parts.

CORE RESEARCH PROJECT: Surface-Induced Molecular Organization in Polymers - SIMOP

CONTACT: Ass. Prof. Dr Roland Sanctuary, University of Luxembourg





How Circuit Foil develops new products with the support of the Ministry of the Economy and Foreign Trade

“Our cooperation with the Gabriel Lippmann Public Research Centre enables us to integrate innovative technologies in our production process.”

Luc Helsen, CEO, Circuit Foil

Circuit Foil is one of Luxembourg’s most high-tech manufacturing companies, producing top-grade, ultra-fine copper sheets for circuit boards. Employing just 300 people, it relies on public-private partnerships to sustain its research efforts to keep it ahead of increasingly tough competition.

A prime example is how the company is developing a new generation of ultra-thin foil, to be produced in an innovative, more economical way with the Gabriel Lippmann Public Research Centre.

This new product will be more stable through the innovative use of non-copper materials. As well, the partners are working on an alternative to the electrolysis-based production process, which is costly in both electricity and water. Backing on existing expertise at Gabriel Lippmann, they expect to develop a new, more efficient system using plasma.

CIRCUIT FOIL R&D PROJECT: ULTRATHIN

PUBLIC PARTNER: CRP Gabriel Lippmann (contact: Dr Patrick Choquet)

MOBILITY

HOSTING RESEARCHERS FROM THE PUBLIC SECTOR BOOSTS YOUR BRAIN POWER

Businesses need knowledge to develop and grow, but can not always afford the people that could take them to the next level.

With young ambitious researchers on your team you could overcome the scientific challenges that are slowing project development. They will help you gain instant access to the latest academic knowledge available in the public research institutions. The FNR's AFR Grant Scheme helps the companies to hire these scientists by co-funding their salary.

Also SMEs, with the support of Luxinnovation, can receive funding for the temporary secondment of experienced researchers from public institutions (up to 3 years).

The Ministry of the Economy and Foreign Trade will fund up to half of all the expert's recruitment and salary costs within the company.

The cooperation is also useful as a human resource tool enabling the potential employer and staff members to get to know each other.



How Telindus benefits from academic knowledge through the FNR's AFR grant scheme

“Thanks to this public-private partnership, Telindus has been able to progress more quickly to develop an innovative solution.”

Dr Thomas Scherer, Senior Engineer, Telindus

Telindus Luxembourg is working with the University of Luxembourg to harness the power and flexibility of unused private WiFi capacity, combining their substantial in-house technical expertise with the latest academic knowledge. Testing and marketing is now ongoing.

Security is the key to sharing unused WiFi resources, with both the user and the host needing to be 100% sure that their data and systems are safe.

This topic is addressed by a PhD student studying at the University of Luxembourg in their Interdisciplinary Centre for Security, Reliability and Trust (SnT). A first prototype has been developed at Telindus as a result of this successful cooperation by leveraging the joint expertises of both partners.

AFR RESEARCH PROJECT: Trusted Location Services for Managed Community Networks - WARP MESH

CONTACTS: Yves Neisius, University of Luxembourg (AFR beneficiary),
Prof. Dr Thomas Engel, University of Luxembourg

EXPERTISE

THREE WAYS TO GET ACCESS TO HIGH-LEVEL RESEARCH AND INNOVATION EXPERTISE

Luxembourg's research institutes are bursting with expertise that can be converted into knowledge capital for your small- or medium-sized business. Various schemes are made available by the Ministry of the Economy and Foreign Trade to support companies. Research into new products and processes can be partly outsourced with funding through a sub-contracted relationship. The resultant knowledge will belong to your company.

Before you get to this stage you may want to test if the R&D project is technically feasible. Public labs can take on part or all of this work: identify technological risks and assess technology in terms of performance or positioning against similar products on the market.

There is also help for SMEs looking to innovate with support for related advisory services linked to technology, management consulting, technology monitoring, market research...



How J-Way acquires public expertise with the support of the Ministry of the Economy and Foreign Trade

“Decisive for us to carry on innovating in the face of the economic downturn.”

Jean-Marc Boueyrie, Founder & Managing Director, J-Way

When you are a micro-business and your competitors are some of the biggest companies in the world, agility is your strength. So it is with local firm J-Way, which creates sophisticated online forms for both PCs and smart phones in a market dominated by the likes of Adobe and Microsoft. They turned to PPPs to help boost their knowledge capital.

J-Way’s focus is on anticipating the latest innovations by understanding what users are looking for. Lacking the highly specialised expertise internally, they turned to the Henri Tudor Public Research Centre for help. Their experts were able to guide J-Way towards market best practice and offer ideas to improve connections between applications.

J-WAY R&D PROJECT: FORMPUBLISHER MOBILE PLATFORM

PUBLIC PARTNER: CRP Henri Tudor (contact: Pierre Brimont)

SHARED INFRASTRUCTURES

SUPER-CHARGED COOPERATION

Reaching out to the wider business community can give you and your colleagues in other companies an important boost. Not only can you all benefit from sharing existing knowledge about technology and processes, but you might wish to take this further through joint R&D projects and infrastructure sharing.

Through “innovation clusters” you could achieve this and more, with the costs of managing and promoting of these networks cofunded by the Ministry of the Economy and Foreign Trade. Private and public researchers alike can receive support for investment in infrastructure and equipment, as well as for spending on promotion, management, training and conferences.

FUNDING OPPORTUNITIES FOR PUBLIC-PRIVATE PARTNERSHIPS

SUMMARY

	R&D PROJECTS	MOBILITY OF RESEARCHERS	ACCESS TO EXPERTISE	SHARED INFRASTRUCTURES
<p>MINISTRY OF THE ECONOMY AND FOREIGN TRADE</p> <p>Guidance and support services are provided by Luxinnovation, the National Agency for Innovation and Research.</p>	Applied research or development projects	Temporary secondment of researchers to SMEs	Sub-contracted research or development Technical feasibility studies Innovation advisory services	Innovation clusters
<p>NATIONAL RESEARCH FUND (FNR)</p>	Fundamental research projects in CORE programme	AFR grants for PhD students and Postdocs		

Please note that similar support schemes are available for European public-private partnerships. For further information: www.innovation.public.lu

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