

The Importance of University-Business Collaboration

MSCA – bridging business and Research

Dr David Docherty – 18th February 2015



A Vision for the UK

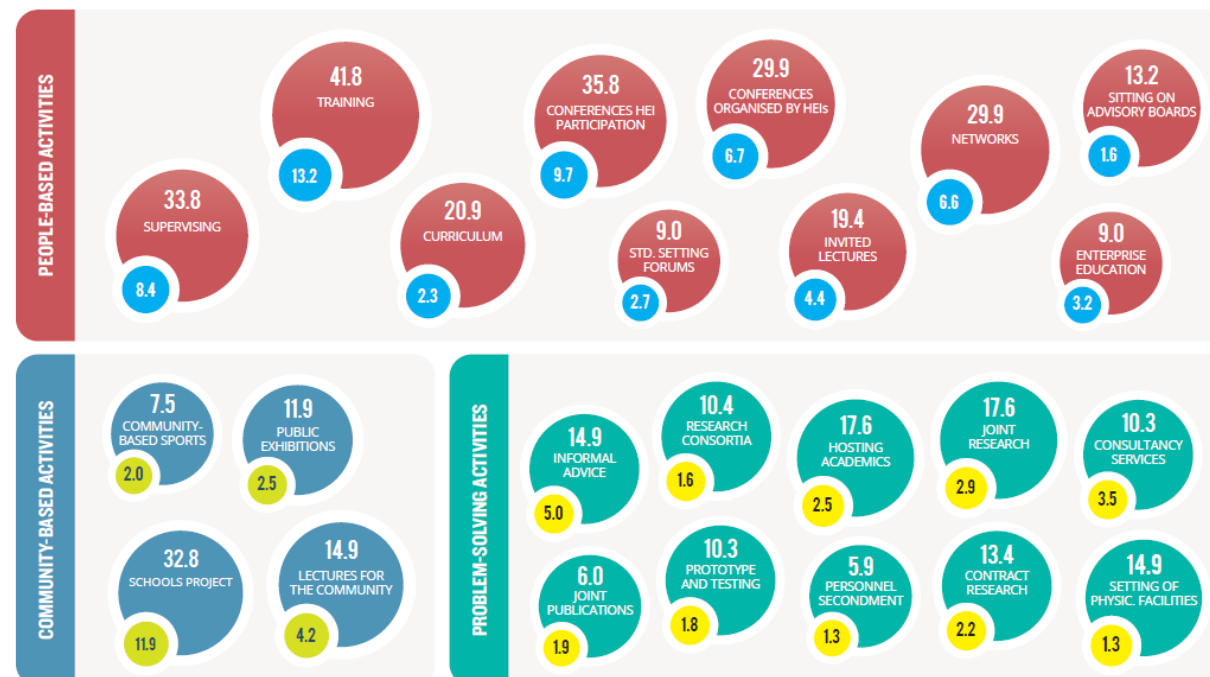
To achieve world leadership in business-university collaboration.

Wilson Review 2012



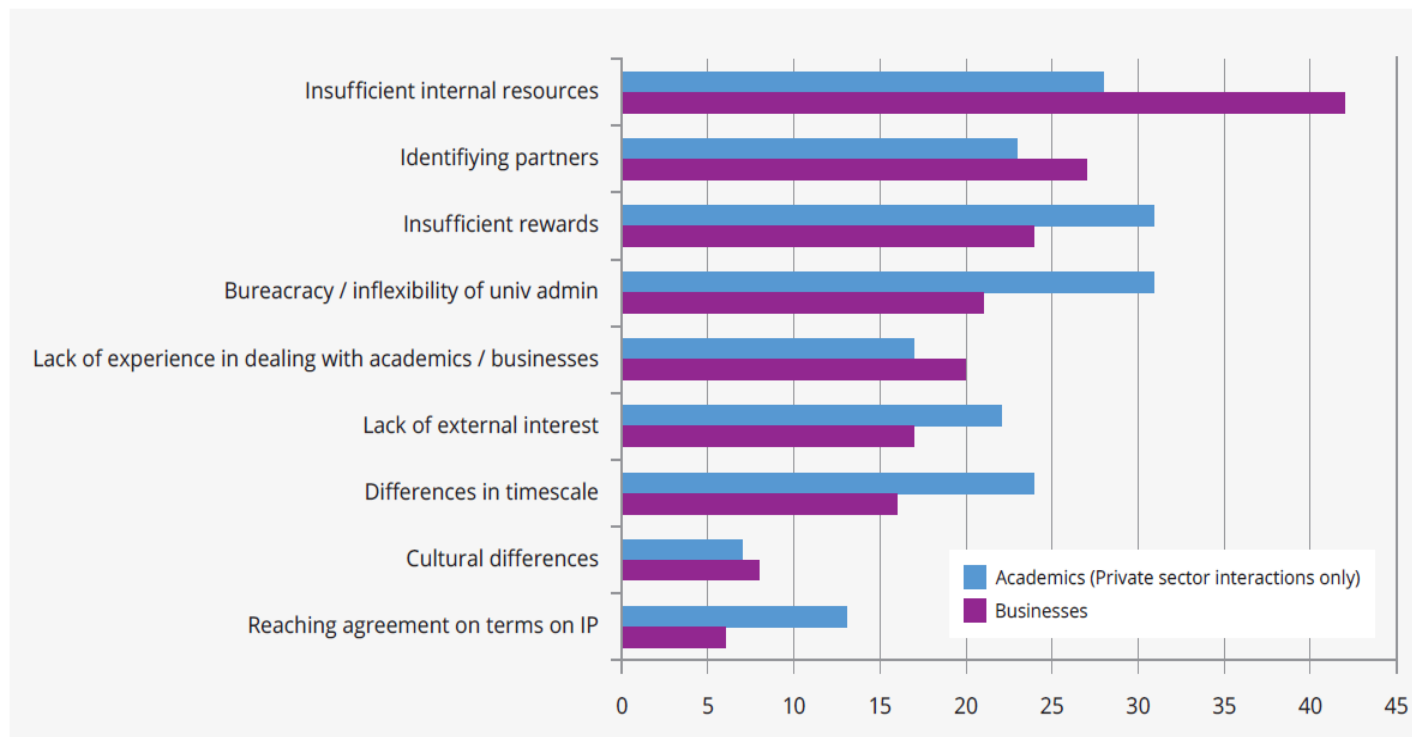
The sheer range of connectivity is impressive

Figure 2: Percentage of UK businesses citing different interaction pathways with the university sector



But there are constraints

Figure 3: Constraints on interactions: businesses and academics engaged with private sector only (per cent of respondents).



Source: Hughes and Kitson (2012)⁴

What is the National Centre for Universities and Business?

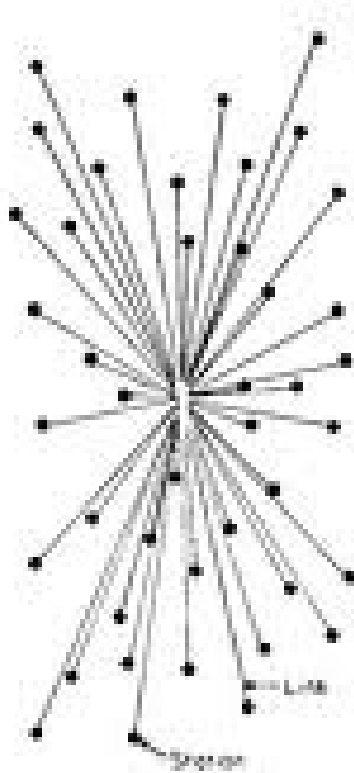
The NCUB is a **networked** centre of excellence driving more successful graduate talent and business innovation through analysis, action, and collaboration.

Areas of Focus

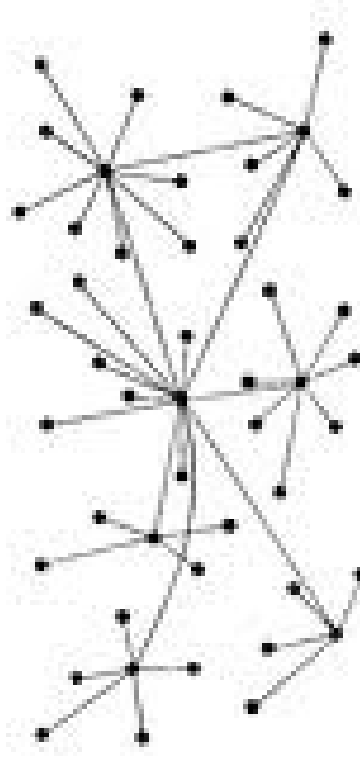
- Brokering and facilitating world class collaboration
- Working together to build the high-level talent base for the UK's future prosperity and well-being.
- Translating inventiveness into innovation

All underpinned by high quality research and analysis.

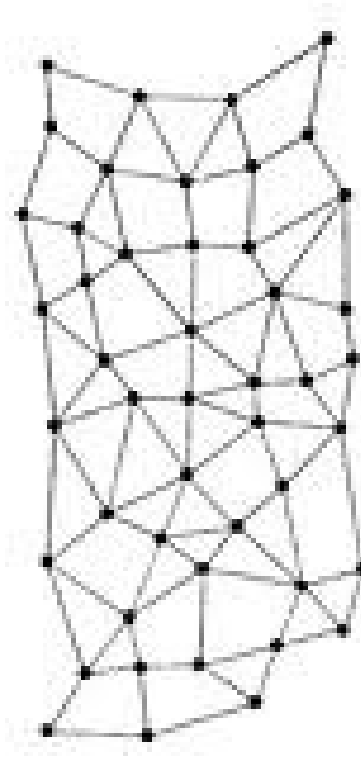
Distributed networks



CENTRALIZED
(A)



DECENTRALIZED
(B)



DISTRIBUTED
(C)

MEMBER FILTER

Filter by Organisation

- ☒ Business
- ☐ University
- ☐ Stakeholders

Filter by Sector

Filter by Keywords

Filter by Region

FIND A MEMBER




Search here...

SEARCH MEMBERS































Connect with NCUB

Sign up for our monthly newsletter

We'd love to hear from you. Contact us via [Email](#), [Twitter](#) or [Facebook](#) below.

YOU ARE HERE: [HOME](#) > [MEMBERS](#)



NCUB

BLOGNEWSMEMBERS

SUCCESS STORIES

LEADERSHIP COUNCIL

REPORTS

FIND A MEMBER

Search here...

SEARCH MEMBERS

Connect with NCUB

Sign up for our monthly newsletter

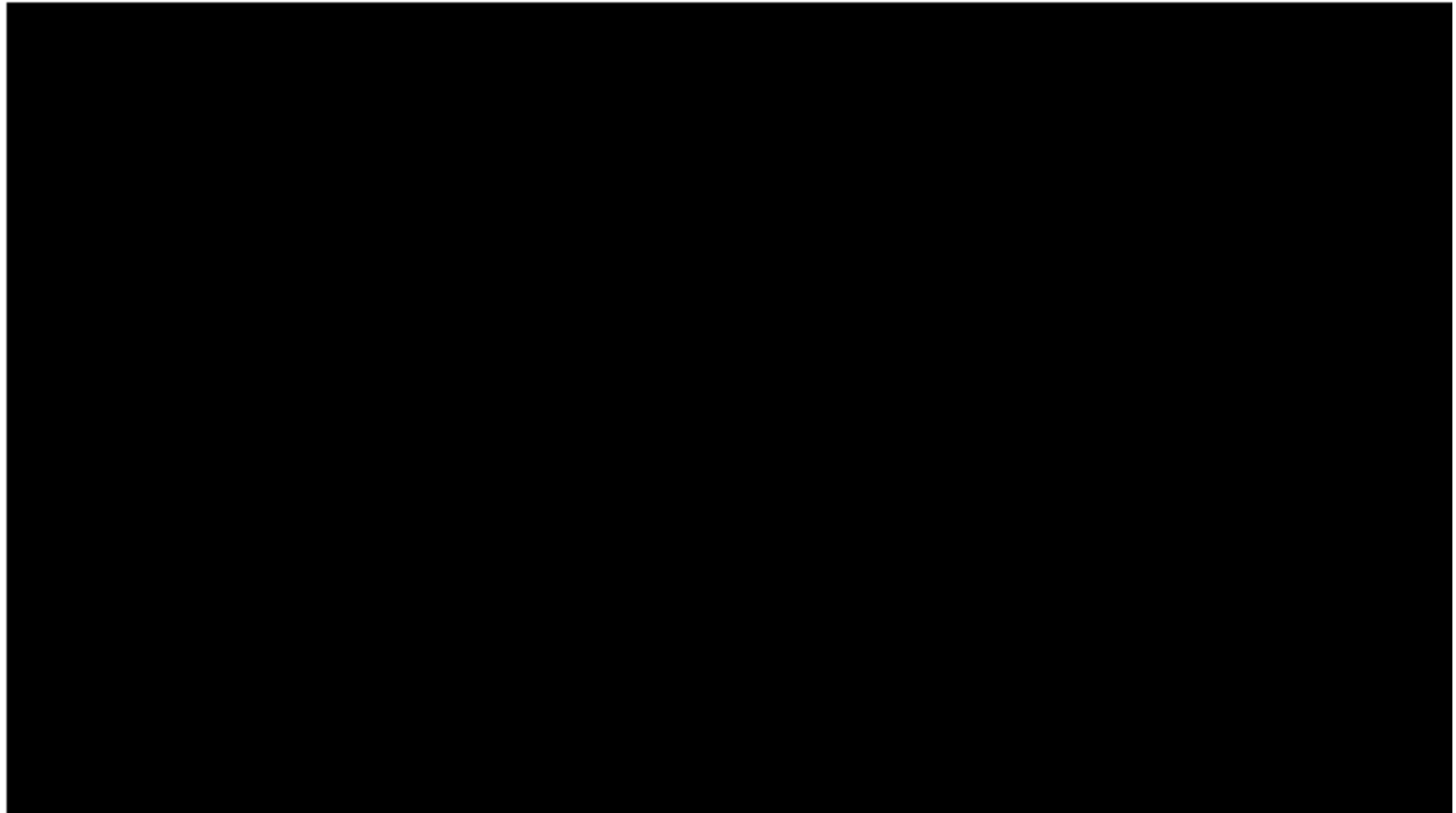
We'd love to hear from you.

Contact us via [Email](#), [Twitter](#) or [Facebook](#) below.

 PRIFYSGOL GLYNDŵR WRECCSAM GLYNDŵR UNIVERSITY WRECCSAM	 UNIVERSITY OF LONDON			
	 The University of Manchester			
		 The University of Chicago Booth School of Business		
				 UNITED KINGDOM • CHINA • MALAYSIA



Support the Vision and Mission





Role of the NCUB

Led by Leaders: A unique UK-wide network of business, university and innovation leaders.

Digital Innovators and Inspirers: Curators of digital platforms that create opportunity for all universities, research institutes, businesses, employers and students.

Trusted Analysts: Repository of good practice and guidance; independent myth-busting analysis and robust intelligence gathering for better business-university collaboration.

Change and Programme Managers: Create, coordinate and develop programmes to strengthen strategic partnerships between business, universities and the publicly-funded innovation system.



Current NCUB website resources

- **Success Stories**
Case studies of university-business collaboration across the UK, to inspire and share best practice across the world.
- **Blogs**
Personal experiences of collaboration.
- **Quality Placements online report**
Showing the benefits through participants quotes and myths busted.
- **KTP Summary reports**
Re-producing NCUB research for business and academic audiences.
- **NCUB Students section**
Placement listings, 'my placement experience', and 'what we're looking for' from employers

Overcoming barriers

- **Reducing the information and guidance gaps** for small and mid-sized companies through a Digital Portal with widely-distributed high-quality free information, advice and guidance.
- **Overcoming size inequality and privileged access** *through digital brokerage*.
- **Increasing trusted sector-specific intelligence and change management** for sectors not sufficiently skilled at university-business collaboration. analysis and change management.
- ***Creating regionally-specific collaboration support*** through digital platforms and smart specialisation.
- ***Creating cross-sector skills and talent development programmes*** within a coordinated approach to collaboration on tough, long term challenges (e.g women into engineering, placements), and emerging industries (e.g. interdisciplinarity in digital and biological sciences).
- ***Supporting student work experience programmes*** with information, advice guidance and brokerage.

London Creative and Digital Fusion

London Fusion provides a fully-funded package of support in three phases. These aim to help businesses to collaborate, develop, and innovate.

- Phase 1: **Inspire** Collaboration and Innovation
- Phase 2: **Fuse** business knowledge, creativity and technology
- Phase 3: **Create** new products and services



London Fusion Results

Since July 2012, the project has supported 426 SMEs with over 11000 worth of business support, [and] created over 100 new jobs.





Thank you!

Contact us at
david.docherty@ncub.co.uk

www.ncub.co.uk



The SME instrument and other opportunities for UK business

Sivasegaram Manimaaran
Landline: +32 (0)2282 8346
Mobile: +32 (0)4989 76723
Email: sivasegaram.manimaaran@innovateuk.gov.uk

Horizon 2020 - significant opportunity

..... but funding is only part of the story

Most relevant when aligned with vision and strategic direction, to maximise benefit from:

- generation of new knowledge
- building networks
- developing relationships with collaborators and potential customers
- creating opportunities for market growth

Innovate UK support for participants in Horizon 2020

Innovate UK
BRU

National Contact
Points

Knowledge
Transfer
Networks

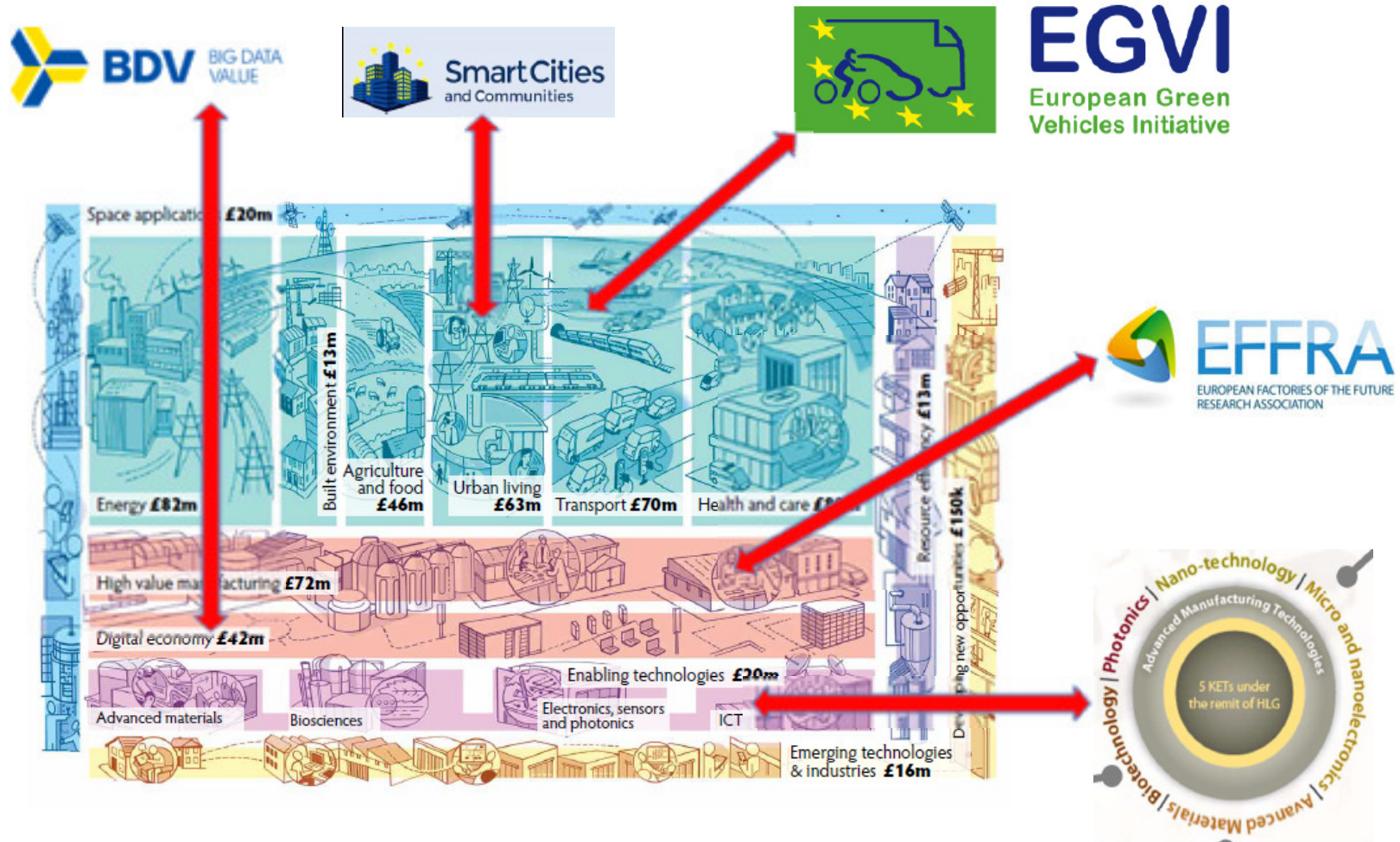
<https://www.h2020uk.org/home>



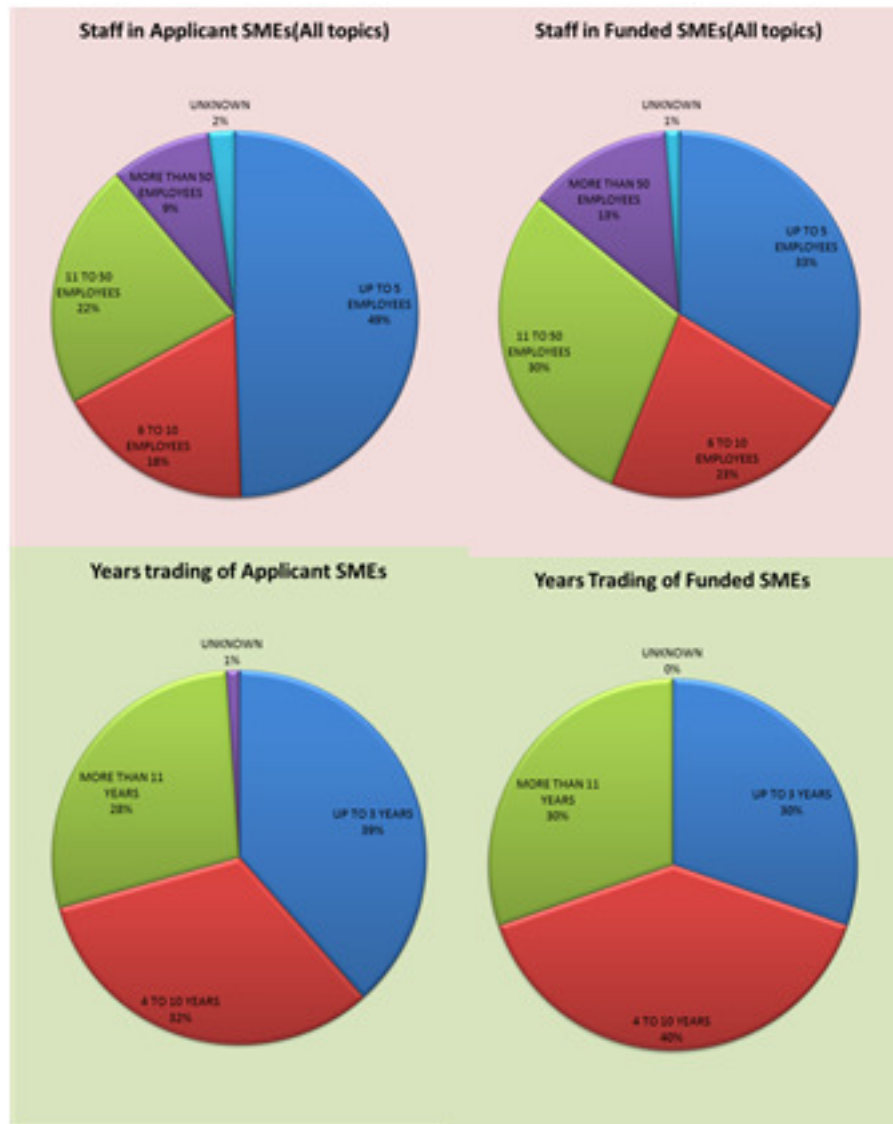
Business Support on Your Doorstep

_connect

Priorities



SME Instrument



- ~ 50% of projects above threshold will be funded
- > 60% of SMEs appear to be newcomers to Framework Programmes
- >75% projects single company
- Best "country success rates":
 - Ireland: 20%
 - Austria: 15%
 - United Kingdom: 11%

Fast Track to Innovation – 2015 launch

Objectives:

- Increase the participation of industry, SMEs and first time applicants in Horizon 2020
- Stimulate private sector investment in research and innovation

Characteristics

- Permanently open call with three cut-off-dates per year - proposals relating to any technology field under LEITs and Societal Challenges
- Open to any legal entity - consortia of 3 to 5 participants
- Proposals shall include a business plan and initial market take-up no later than 3 years after submission.
- At least 60% of the overall budget of the proposal must be allocated to consortium partner(s) from industry, or
- The minimum number of industry participants must be 2 in a consortium of 3 or 4 partners, and 3 in a consortium of 5 partners
- Funding of innovation actions (close-to-market)

Reflections following first set of calls

Work Programme 2014-2015

- More support for innovation, activities close to market and demand side approaches
- €2 billion allocated to 100 topics for Innovation Actions (IA) in Societal Challenges and LEITs; €120+ million for innovation procurement (PCP/PPI); five inducement prices (2015)

Engagement of industry

- €800 million for contractual Public-Private Partnerships; €516 million for SME instrument topics; more than €1.7 billion investment in JTI; €630 million goes to debt and equity facilities; substantial investment in P2Ps

First calls

- Increased industry participation
- Good uptake of IA, other new innovation instruments to be monitored



Marie Skłodowska-Curie actions

Bridging Business and
Research



Paul Harris
Directorate-General for Education and
Culture
Edinburgh, 16 February 2015
Birmingham, 18 February 2015

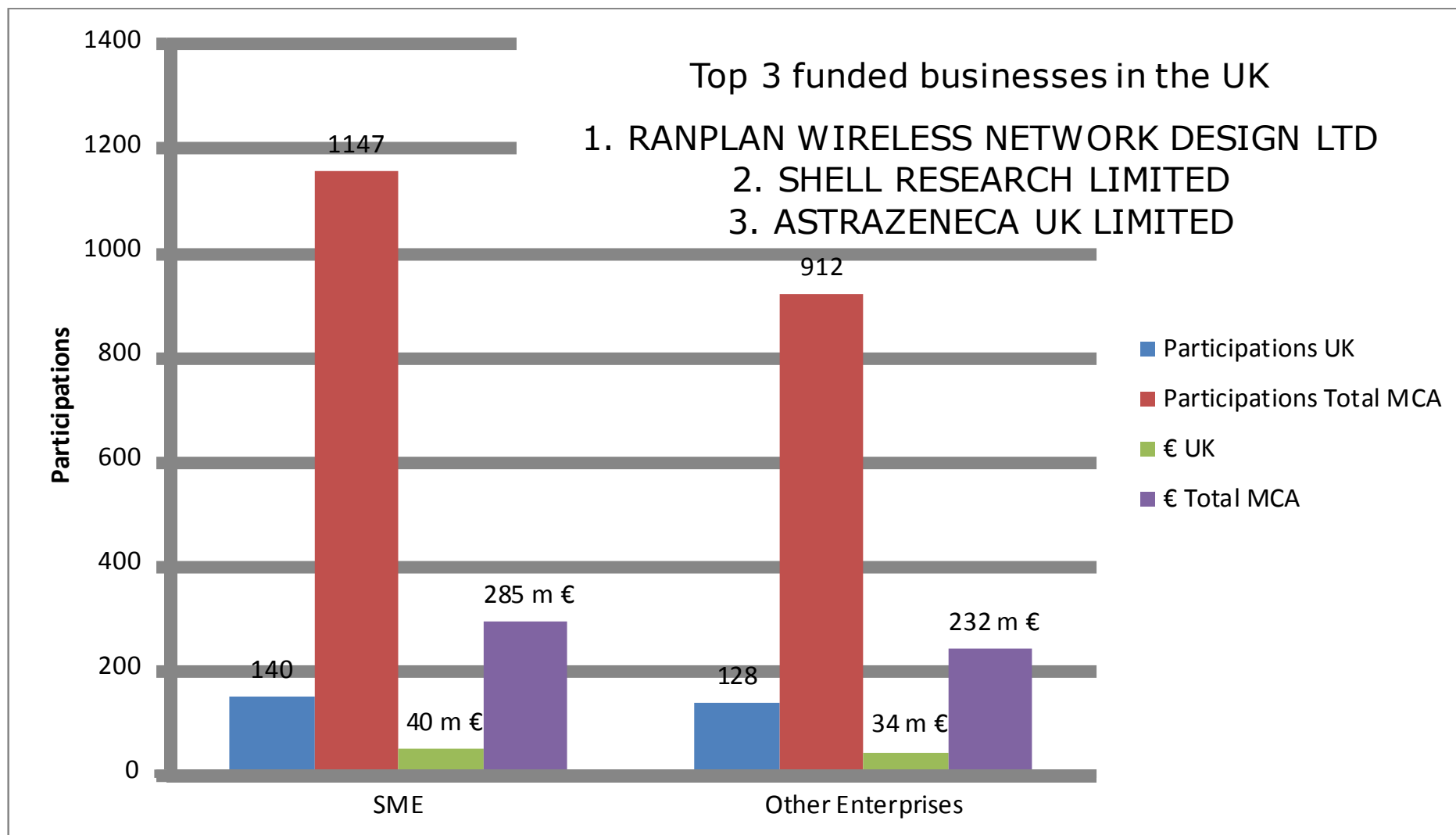
HORIZON 2020

Outline

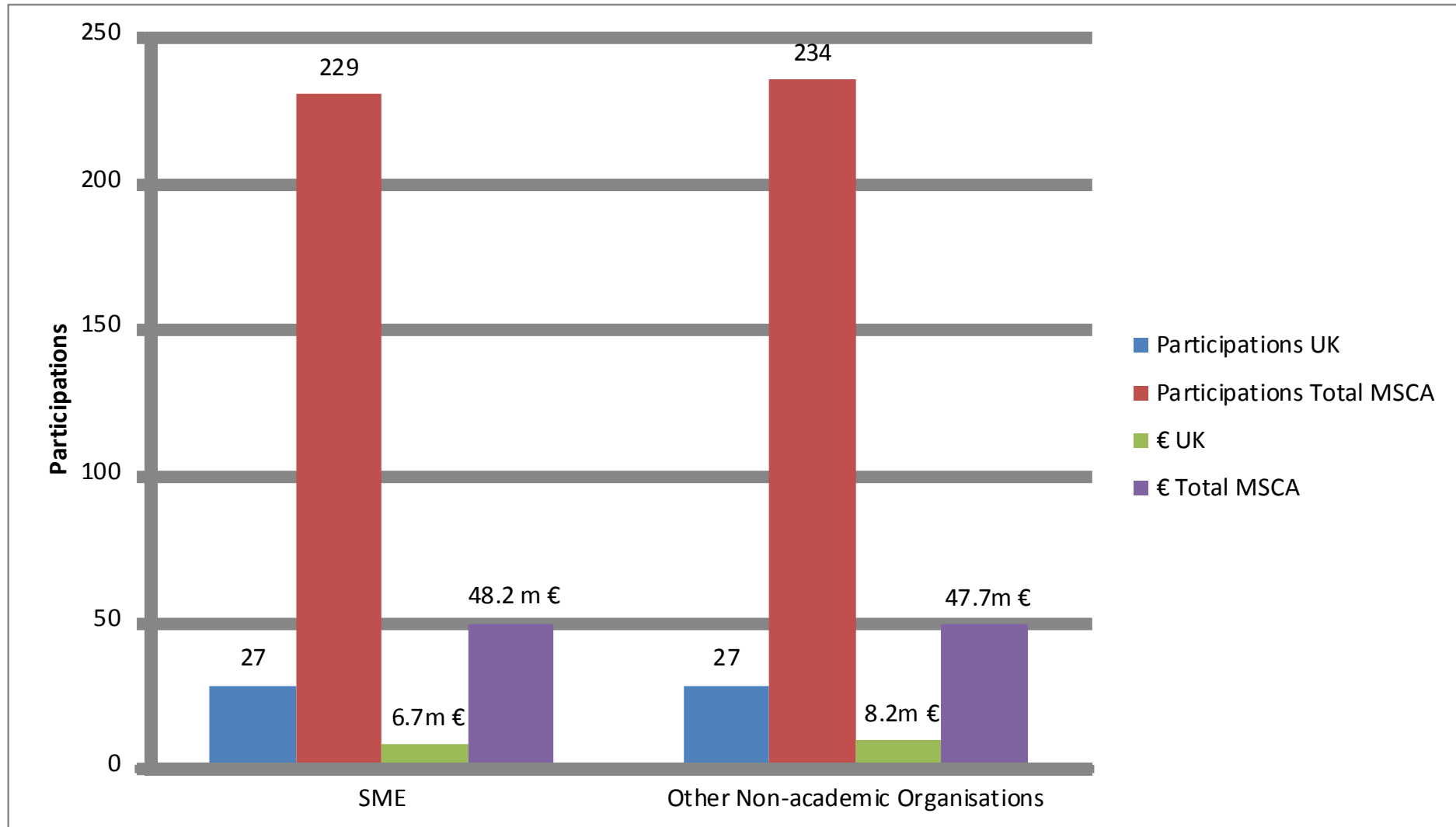
1. **WHY do businesses apply to the MSCA?**
2. **WHAT opportunities do the MSCA offer?**
3. **WHICH MSCA should you choose?**
4. **PRACTICAL information**

WHY do businesses apply to the MSCA?

2007-13 Marie Curie actions



2014 completed calls of Marie S. Curie actions





*Except nuclear energy covered by EURATOM



European Commission | Education and Culture


WHAT opportunities do the MSCA offer?

Key Advantages



Bottom-up approach

Includes all domains of research and innovation



Openness

Strong accent on participation of industry, SMEs and non-academia overall



Mobility

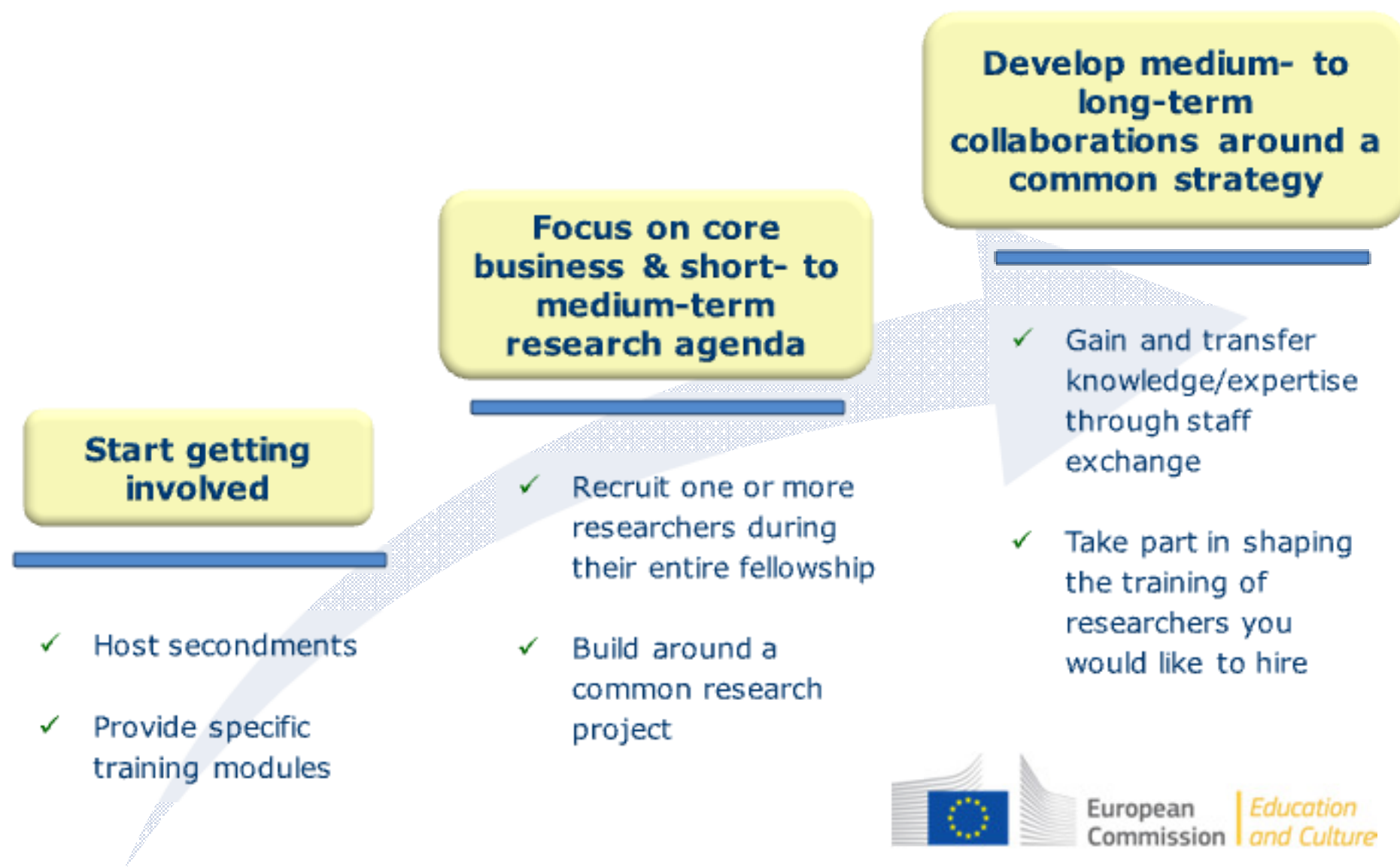
A global scope with trans-national mobility required and often cross-sector mobility as a key component



Flexibility

Level of involvement is proportional to the participant's needs

Choose your level of involvement



Participant organisations

Academia

Public or private **HEI**
awarding academic degrees

Public or private **non-profit
research organisations**

International **European
interest** organisations

Universities

Non-profit
research
institutes

IEIOs

Business and non-academia

Broad definition:

Any socio-economic actor
not included in the
academic sector definition

Industry

SMEs

Other
socio-
economic
actors

Marie Skłodowska-Curie actions

2014-2020: EUR 6 162 million
(GBP 4 824 million)

**Innovative Training Networks -
ITN**

Individual Fellowships - IF

**Research and Innovation Staff Exchange -
RISE**

**COFUND regional, national, and
international programmes**

**European Researchers' Night -
NIGHT**



European
Commission

Education
and Culture

MSC actions

– Financial Overview

RISE	Research, networking, training costs	1800 €	Top-up allowance	2000 €
	Management and indirect costs	700 €		
ITN	Research, networking, training costs	1800 €	Living allowance*	3110 €
	Management and indirect costs	1200 €	Mobility allowance	600 €
			Family allowance	500 €
IF	Research, networking, training costs	800 €	Living allowance*	4650 €
	Management and indirect costs	500 €	Mobility allowance	600 €
			Family allowance	500 €
COFUND	Management costs	325 €	Living allowance Early-stage researchers	1855 €
			Living allowance Experienced researchers	2625 €

* The living allowance base rate is multiplied by Country Correction Coefficient

WHICH MSCA should you choose?

Who do you want to host/recruit?

Early-stage Researchers (ESR)

Less than four years of research experience and **No doctoral degree**

ITN

RISE

COFUND

Experienced Researchers (ER)

At least four years of research experience and / or **A doctoral degree**

IF

RISE

COFUND



European
Commission

Education
and Culture

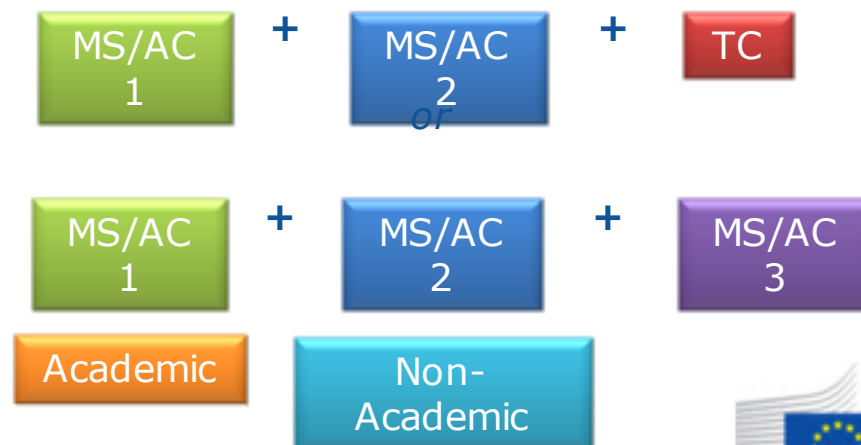
Research and Innovation Staff Exchange (RISE)

- ✓ Strengthen the interaction between academic and non-academic organisations, and between Europe and third countries, through **research and innovation staff** exchanges
- ✓ International and inter-sector **transfer of knowledge** and sharing of ideas and of R&I culture
- ✓ Common **research and innovation project**
- ✓ Highly skilled research and innovation staff **move for 1-12 months**
- ✓ **Budget: € 80 million** in 2015

RISE – Eligibility Conditions

- ✓ At least 3 independent participants in 3 different countries
- ✓ At least 2 participants from 2 different MS/AC
- ✓ If all in MS/AC: at least 1 academic and 1 non-academic

In practice, 2 possible minimum settings:



Innovative Training Networks (ITN)

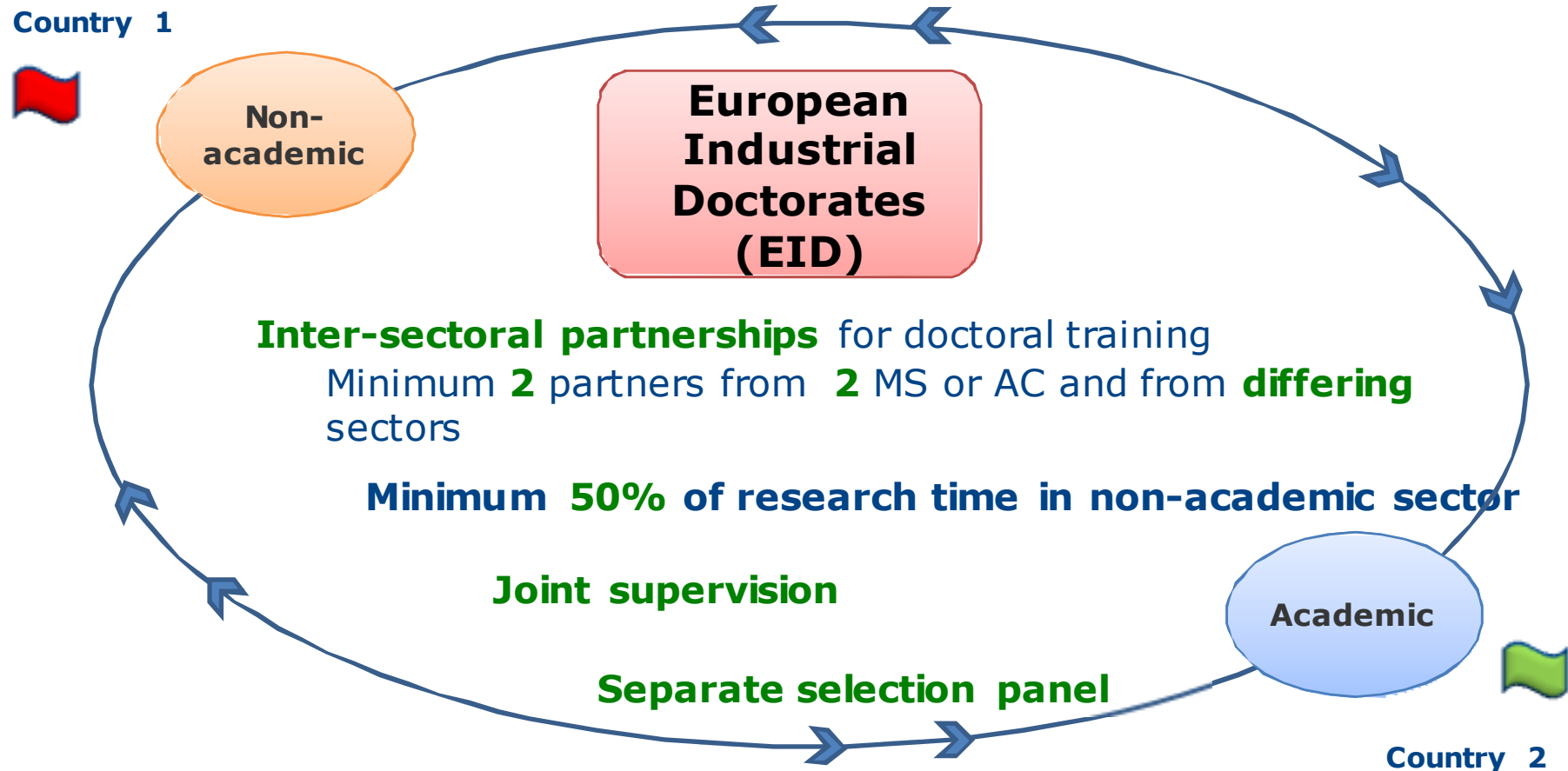
- ✓ **Raise excellence** and **structure research and doctoral training**
- ✓ Train a new generation of **creative, entrepreneurial and innovative early-stage researchers**
- ✓ Trigger **cooperation and exchange of best practice** among participants
- ✓ **Enhance researchers' employability** and provide them with new career perspectives
- ✓ **Triple 'i' dimension** of mobility and particular **focus on innovation skills**

**European
Training
Networks
(ETN)**

**European
Industrial
Doctorates
(EID)**

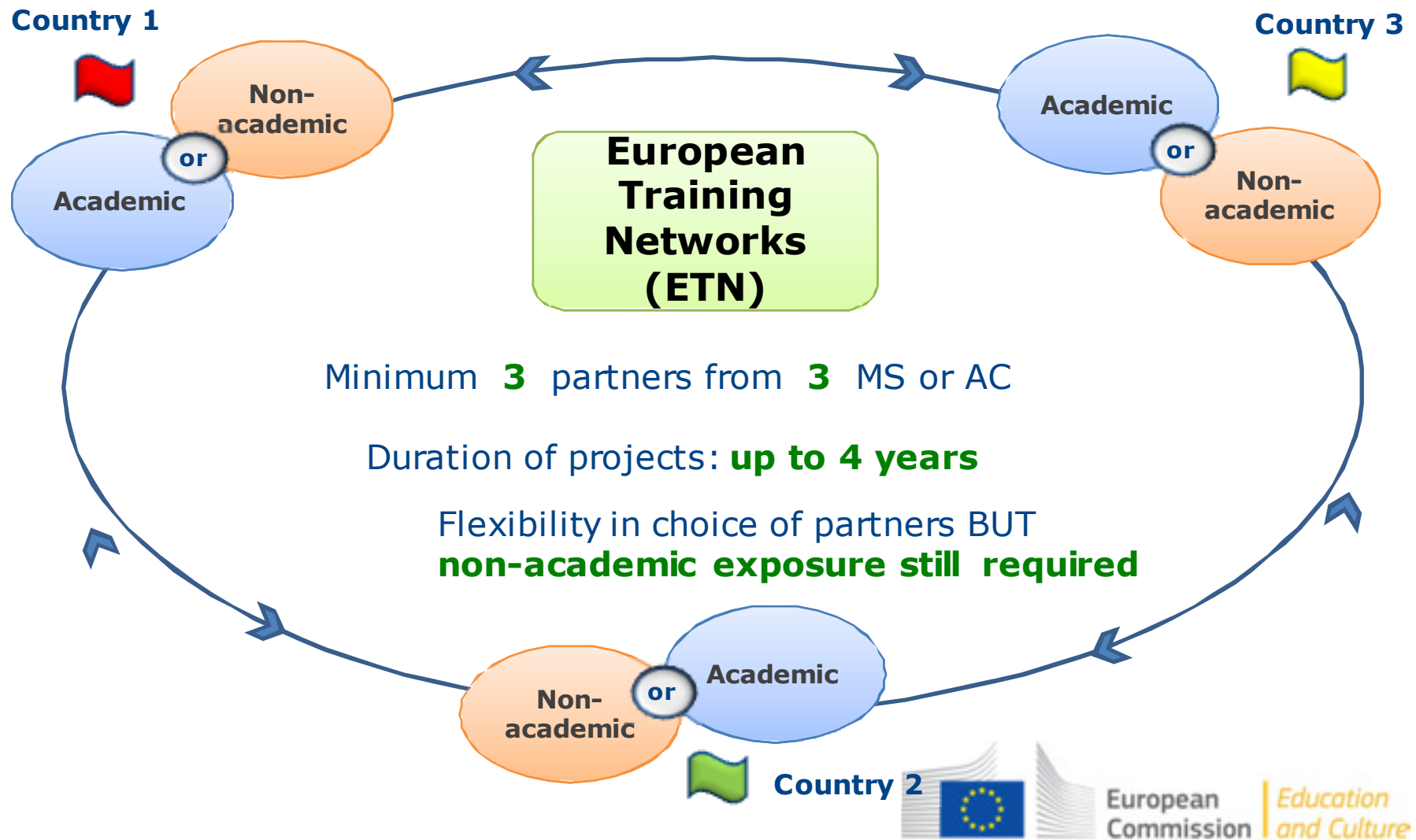
**European
Joint
Doctorates
(EJD)**

Innovative Training Networks (ITN)



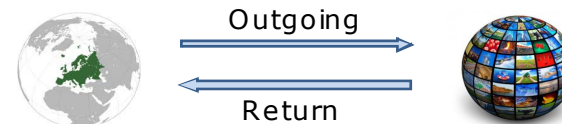
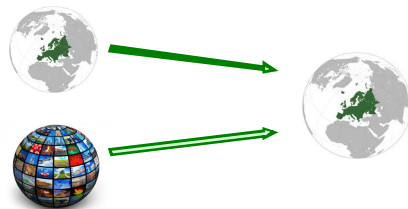
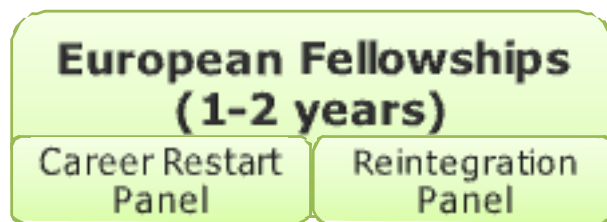
Presentation on EID experience by GSK Spain at
2014 MSCA Italian EU Presidency Conference:
<http://www.msca2014.eu/wp-content/uploads/2014/12/Pomar.pdf>

Innovative Training Networks (ITN)



Individual Fellowships (IF)

- ✓ Enhance the creative and innovative potential of **experienced researchers**
- ✓ Provide opportunities to **acquire new knowledge, work on research projects in a European context or outside Europe**
- ✓ Catalyse significant **development in their careers** in both sectors
- ✓ **Optional 3-6 month secondments** anywhere in Europe to increase fellowship impact, especially on non-academic sector
- ✓ **Budget: €215 million** in 2015 (Global Fellowships: €27 million)



COFUND

- ✓ Promote **international, intersectoral and interdisciplinay research training**, as well as transnational and cross-sector **mobility** of researchers at all stages of their career by **co-funding new or existing regional, national, and international programmes**
- ✓ Mono-beneficiary: **organisation funding or managing doctoral or post-doctoral programmes**
- ✓ **Leverage funding** and combat fragmentation (possible synergies with ESIF)
- ✓ **Spread MSCA best practices**
- ✓ **Budget: €80 million** in 2015 (Doctoral Programmes: €30 million)

**Doctoral
Programmes**

ESR

**Fellowship
Programmes**

ER

PRACTICAL information

MSCA Calls

IF	12/03/2015 – 10/09/2015	EUR 215 million
RISE	6/01/2015 – 28/04/2015	EUR 80 million
COFUND	14/04/2015 – 1/10/2015	EUR 80 million

MSCA Workflow

Application

Find a Call

Find Partners or
Apply as
Individual

Create your
account on the
Participant Portal

Register your
organisation
Identify or get a
PIC

Submit your
proposal:



Part A: 10
pages



Part B: 30
pages (IF 10
pages)



NCP

Evaluation

3 independent experts



Grant Agreement
(GA)

For successful applicants : TIME-TO-GRANT = 8 MONTHS



Electronic signature of GA via the Participant Portal

New structure of GA: legal provisions all in 1 document

Reporting

Periodic Report:
technical and financial

BUT

*In general, fewer periodic reports
needed than in 2007-13 MCA*

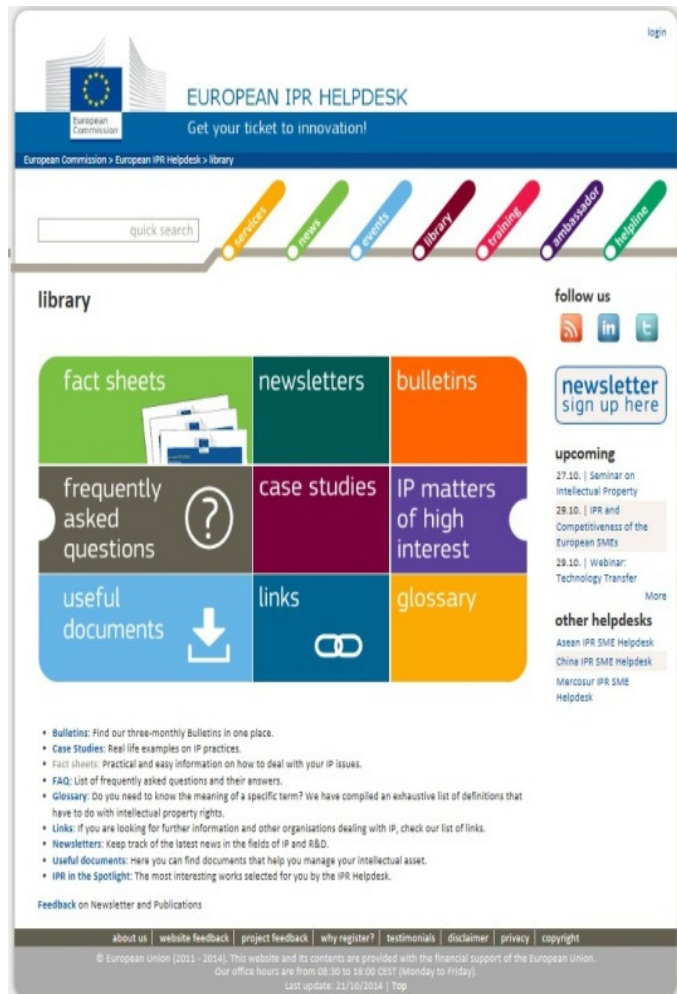
Final Report:
technical and financial



European
Commission | Education
and Culture

The IPR Helpdesk can help you for IPR-related issues in H2020

<https://www.iprhelphdesk.eu/>



- ✓ Aims to provide **feedback** within a few days
- ✓ Regular events around Europe (**subscribe** for news alerts)
- ✓ **MSCA approach very similar** to rest of H2020 + access rights for researchers
- ✓ IPR aspects of Grant Agreements are explained in non-legal terms in **Annotated Grant Agreements:**

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf

The EEN can help you including to find partners

<http://een.ec.europa.eu/>



The screenshot shows the Enterprise Europe Network (EEN) website. At the top, there is a header with the European Commission logo and the text "ENTERPRISE EUROPE NETWORK". Below this is a navigation bar with links: Home, About, Services, Events, Success stories, and News & Media. The main content area features a large "services" banner with a background image of a crowd of people. On the left, there is a section for "Share Success Stories" with a "Success Stories Feed" and an "Embed Success Stories" option. Below this is a "Services" section with a link to "Going international Technology". In the center, there is a section titled "Our services" with a list of services: Going international, Technology transfer, Access to finance, Research funding, Advice on EU law and standards, Intellectual property and patents, and Speak up on EU law. On the right, there is a search bar and a logo for the Enterprise Europe Network with the tagline "Business Support on Your Doorstep".

European Commission

ENTERPRISE EUROPE NETWORK

European Commission > Enterprise Europe Network > Services > Our services

Home About Services Events Success stories News & Media

services

Share Success Stories

Success Stories Feed

Embed Success Stories

Services

Going international Technology

Our services

Learn more about what we can do for your company in the following areas:

- Going international
- Technology transfer
- Access to finance
- Research funding
- Advice on EU law and standards
- Intellectual property and patents
- Speak up on EU law

Search

enterprise europe network

Business Support on Your Doorstep

Marie Skłodowska-Curie UK National Contact Point Helpdesk



- ▶ Free advice to the UK on all MSC actions, including:
 - Calls
 - Eligibility
 - Application help
 - Results
 - Contractual issues
 - Social security and tax
 - Contractual issues
- ▶ Helpdesk contact details:
 - mariecurie-uk@bbsrc.ac.uk
 - Tel: +32 2 230 0318
 - UK information event announcements:
<http://www.ukro.ac.uk/mariecurie/index.htm>

Useful Links to help you

Where to get more information?

- ⇒ MSCA website: ec.europa.eu/msca
- ⇒ Horizon 2020 website: ec.europa.eu/programmes/horizon2020

How to apply for MSCA?

- ⇒ Participant Portal: ec.europa.eu/research/participants/portal

THANK YOU FOR YOUR ATTENTION!

paul.harris@ec.europa.eu

This presentation represents solely the views of its author and cannot in any circumstances be regarded as the official position of the Commission

Marie Sklodowska-Curie Actions: Bridging Business and Research

**Experiences of engaging in European collaboration with
businesses and academia.**

An SME perspective on how EU funding changed their business.

Peter Laybourn

Chief Executive

International Synergies Limited

Wednesday, 18th February 2015, University of Birmingham

Introducing International Synergies Limited

- Birmingham-based SME with under 20 employees
- Offices in Birmingham, Brussels and Belfast
- Specialists in Industrial Ecology Solutions
(**World leader** in industrial symbiosis)
- Clients from public and private sector
- **Experience working in over 20 countries across five continents**

International Synergies – what we provide

- Innovation (in the field of industrial ecology/circular economy)
- Business networks (e.g. National Industrial Symbiosis Programme in the UK)
- ICT tools such as Synergie®
- Capacity building across **5 continents**
- Training materials

Access / Influence / Convening Power



International Synergies
industrial ecology solutions

Access / Influence / Convening Power



International Synergies
industrial ecology solutions

Impact on European Policy & Recommendations

- European Waste Framework Directive - Best Practice (**2009**)
- Roadmap to a Resource Efficient Europe (2011) – exemplar case study
- DG Enterprise: Sustainable Industry-Going for Growth &
- Resource Efficiency (2011) – exemplar case study
- DG Regions: Connecting Smart and Sustainable Growth through Smart Specialisation – exemplar case study (2012)
- DG Environment: Priority for industrial policy in (2013) recommendation
- DG Enterprise: Communique on Green Entrepreneurship (2013)
- Commissioner Potocnik launches EUR-ISA (2013)
- Horizon 2020 (2014) included to deliver circular economy
- European Resource Efficiency Platform key recommendation (2014)
- Eco-Innovation Library – Innovation Seeds (2014)
- DG Innovation and Research – Short guide to assessing environmental impacts of research and innovation policy (**2014**)

European Commission programmes

- FP7
- Climate Knowledge and Innovation Community (C KIC)
- European Regional Development Fund
- Life+
- Marie Curie
- Intelligent Energy
- Switch Asia

Countries – UK, Poland, Romania, Germany, Hungary, **China**

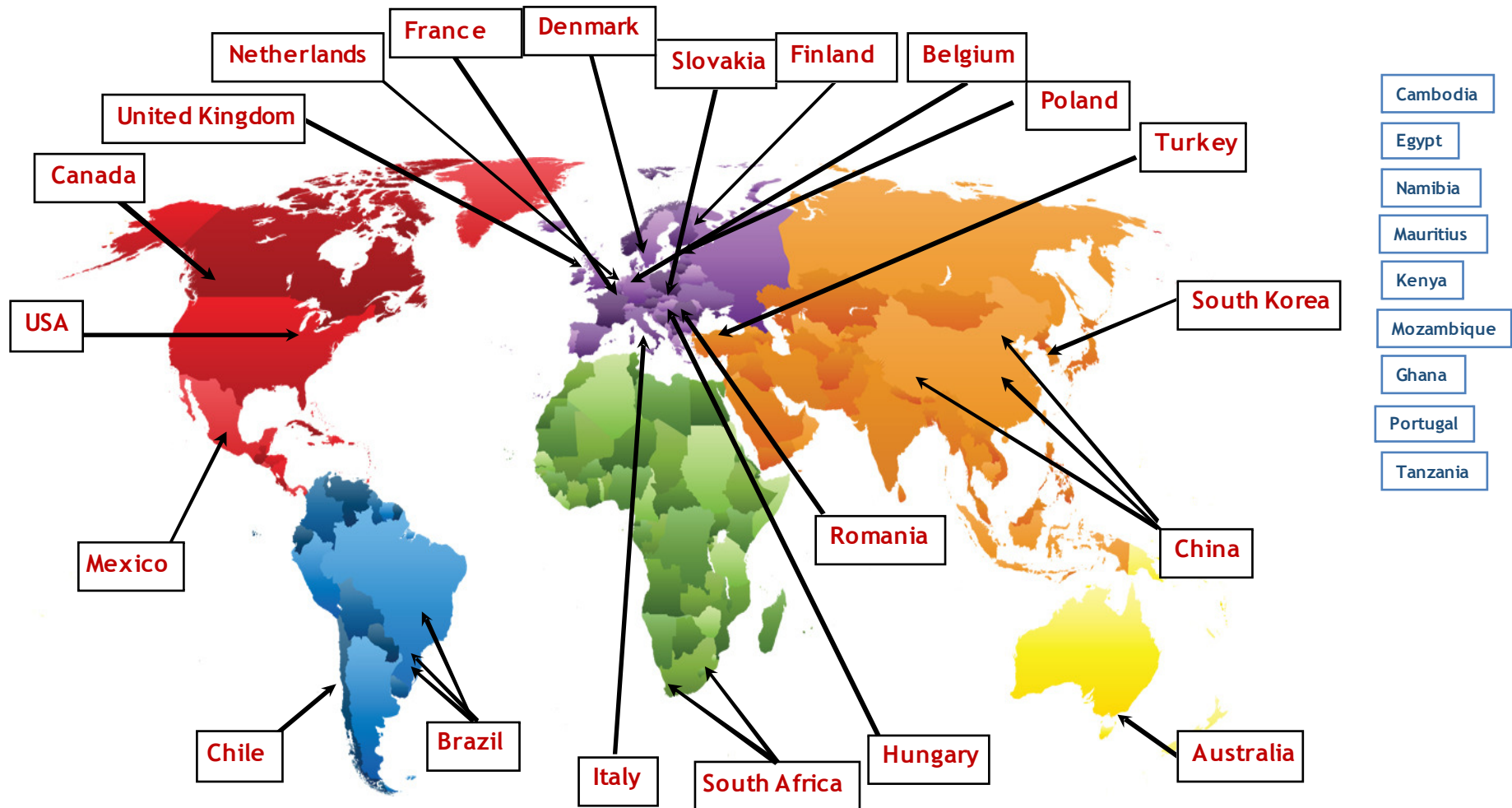
Value - **€6 million** ... cutting teeth on above programmes has led to ...

€650,000 – Turkey, France, Netherlands, Finland, Italy, Denmark

€1.1 million – Brazil, Mexico, China, Canada, Chile, S. Africa, USA

International Synergies' Global Experience 2014

Expressions of Interest



Horizon 2020

- Factories of the future 3: Global Energy and other resources efficiency in manufacturing enterprises
(Greece led, Ireland, Italy, Spain, UK)
- WASTE – 1 Moving towards a circular economy through industrial symbiosis
(UK led, Denmark, France, Netherlands, Sweden, South Africa)
- SPIRE – 6 Energy and resource management systems for improved efficiency in the process industries
(Spain led, France, Germany, Greece, Netherlands, UK)
- Waste 4d, Waste 6a, Waste 6b, Waste 7
- Total potential for International Synergies **c€2-7million**

Key points:- **invited** into 11 consortia so far and **universities present** in all consortia

Universities (non-exhaustive)

- University of Birmingham
- University of Warwick
- Institute for Manufacturing (Cambridge)
- Herriot Watt
- University of Surrey*
- University College London (UCL)
- Imperial College London
- University of Hull*
- Paris Tech*, TU Delft, Wuppertal, Troyes, Monterrey, Copenhagen

Engaged to be innovation partners, bid writers, provide technical solutions, delivery, experience, networks, credibility etc.

*interns (more later!)

Tips for SME newcomers ...

- Long term strategy (persevere and expect some failures)
- Don't lead bids (initially)
- Languages (we're lucky) consider interns in short term
- Invest time in systems (everything straightforward after that)
- Build up networks and use them
- Many sources of help - Universities, EC sites, Innovate UK, UKTI
- Universities need YOU! (H2020, SME Instrument) now reciprocal

Thank you for listening...

Peter Laybourn
Chief Executive
International Synergies Limited

t: +44 (0) 121 433 2660

e: peter.laybourn@international-synergies.com
www.international-synergies.com

@IntlSynergies
@NISPnetwork
@peter_laybourn

International Synergies
industrial ecology solutions

Corporate Presentation



rinicom
generation wireless



Company Overview

- Incorporated in September 2002;
- Based on expertise in wireless communications and digital TV;
- Privately owned and profitable;
- Winner of Queens Awards for Excellence in Business 2013;
- Excellent working relations with leading edge technology Companies and major customers;
- Strong management and development teams;
- Research cooperation with the leading UK Universities

Partners and Customers



Ultra
ELECTRONICS

NEC

Empowered by Innovation



BAE SYSTEMS



THALES



COBHAM

KNAUF



Rinicom Products and R&D Projects

Communications



Surveillance and C2



R&D Projects

- Data Mining
- Biometric Identification
- Video Analytics
- Thermal imaging analytics
- Large Data
- Secure Data Bases
- Ethical Data Storage and Search

Our Project

- We identified a problem by talking to customers
- The problem was too big to be resolved by us
- We went to EU networking event and presented the idea and the challenges
- Had to make hard choices and select only the most relevant partners
- We deliberately withdrew from being a coordinator, in order to make consortium stronger
- The project was a success and commended by the Commission
- We have a new product and new customers (some of them are consortium members) as a result

How to start?

- Understand your USP
- Attend as many networking events as possible
- Don't play numbers game – joining many proposals doesn't increase your chances of success.
- Join good and solid consortium with innovative idea which matches objectives of the call
- If unsure, talk to experts (UK NCP, Universities)

Thank You!

Questions?



rinicom
generation wireless

Prof.Garik Markarian (CEO)

Office: +44 (0) 1524 543850

Mobile: +44 (0) 7881943987

e: garik@rinicom.com

w: www.rinicom.com