



What is on the Horizon? 2020

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Main topics

- The political context
- Innovation Union – turning the European Union into an Innovation Union
- Horizon 2020 – the future EU Framework programme for Research & Innovation (2014-2020)
- Potential benefits to UK
- The next steps

Europe faces:

- Lack of growth, bleak economic climate;
- Increasing imbalances across the continent;
- Declining public confidence and high social costs of adjustment;
- Increased competition from other parts of the world;
- Debate on the EU and its future



Europe 2020 strategy

- Objectives of **smart, sustainable and inclusive growth**
 - Headline targets, including 3% of GDP invested in R&D
 - 7 flagship initiatives
 - Innovation Union
 - Digital Agenda for Europe
 - Resource Efficient Europe
 - Industrial policy for the globalisation era
 - Youth on the move
 - An agenda for new skills and jobs
 - European platform against poverty
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Innovation Union



Innovation Union

- A **strategic** and **integrated approach** to research & innovation
 - Innovation is an overarching policy objective driving all other policies
 - Innovation policy is steered and monitored at the highest level
- Radically improving framework conditions and reduce time-to-market
- Prioritising resources around major challenges
- Fully exploiting non-technological innovation



Turning the European Union into an Innovation Union

- Improving framework conditions for innovation to flourish
- 34 commitments
 - Speeding up standardisation
 - Making better use of and 'modernising' public procurement procedures
 - Creating a real internal market for venture capital
 - Agreeing on a unified European patent
 - Completing the **European Research Area**

European Research Area:

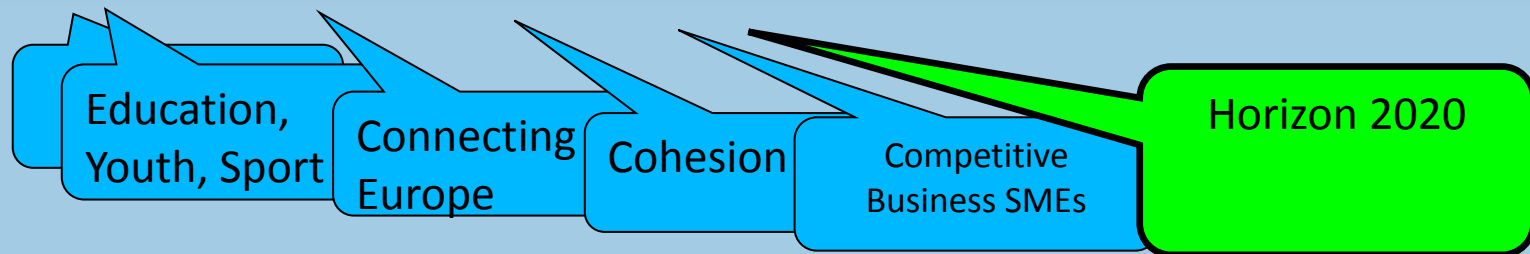
- "An **unified research area open to the world** based on the **Internal Market**, in which researchers, scientific **knowledge** and technology **circulate freely** and through which the Union and its Member States strengthen their scientific and technological bases, their **competitiveness** and their capacity to collectively address **grand challenges**."

European Research Area - Five Key Priorities

1. More effective national **research systems**
2. Optimal **transnational co-operation and competition**
3. An **open labour market** for researchers
4. Gender equality and gender mainstreaming in research
5. Optimal circulation, access to and transfer of scientific **knowledge** including via digital ERA

Key challenge: *stabilise the financial and economic system while taking measures to create economic opportunities*

- 1. Smart & inclusive growth (€491bn)



- 2. Sustainable growth, natural resources (€383bn)
- 3. Security and citizenship (€18.5bn)
- 4. Global Europe (€70bn)
- 5. Administration (€62.6bn)



THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020



What is Horizon 2020?

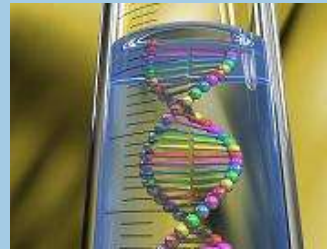
- Commission proposal for a 80 billion euro research and innovation funding programme (2014-2020)
- A core part of Europe 2020, Innovation Union & European Research Area:
 - **Responding to the economic crisis** to invest in future jobs and growth
 - **Addressing people's concerns** about their livelihoods, safety and environment
 - **Strengthening the EU's global position** in research, innovation and technology

Horizon 2020 - What is new?

- A single programme bringing together three separate programmes/initiatives
- Coupling research to innovation – from research to retail, all forms of innovation
- Focus on societal challenges facing EU society, e.g. health, clean energy and transport
- Continuation of investment in frontier research
- Simplified access, for all companies, universities, institutes in all EU countries and beyond.

Horizon 2020 - Three priorities:

1. Excellent science



2. Industrial leadership



3. Societal challenges



Priority 1 - Excellent Science

Why:

- **World class science** is the foundation of tomorrow's technologies, jobs and wellbeing
- Europe needs to develop, attract and retain **research talent**
- Building on and further developing **Europe's outstanding scientific base**
- Promoting Europe as **world leaders** in frontier research and innovation
- Researchers need access to the **best infrastructures**

Excellent science (€bn, 2014-20)

European Research Council <i>Frontier research by the best individual teams</i>	13.3
Future and Emerging Technologies <i>Collaborative research to open new fields of innovation</i>	3.1
Marie Curie actions <i>Opportunities for training and career development</i>	5.6
Research infrastructures (including e-infrastructure) <i>Ensuring access to world-class facilities</i>	2.5

Priority 2 – Industrial Leadership

Why:

- **Strategic investments** in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors
- Europe needs to **attract more private investment** in research and innovation
- Europe needs **more innovative SMEs** to create growth and jobs

Industrial leadership (€bn, 2014-20)

Leadership in enabling and industrial technologies <i>ICT, nanotechnologies, materials, biotechnology, manufacturing, space</i>	13.8
Access to risk finance <i>Leveraging private finance and venture capital for research and innovation</i>	3.5
Innovation in SMEs <i>Fostering all forms of innovation in all types of SMEs</i>	0.7 complemented by c. 20% of societal challenges and industrial leadership and ‘access to risk finance’ with strong SME focus

Priority 3 – Societal Challenges

Why:

- **Addressing pressing concerns** of citizens and society/EU policy objectives (eg. climate, environment, energy, transport etc) cannot be achieved without innovation
- Breakthrough solutions come from **multidisciplinary collaborations**, including social sciences and humanities
- Promising solutions need to be tested, demonstrated and scaled up

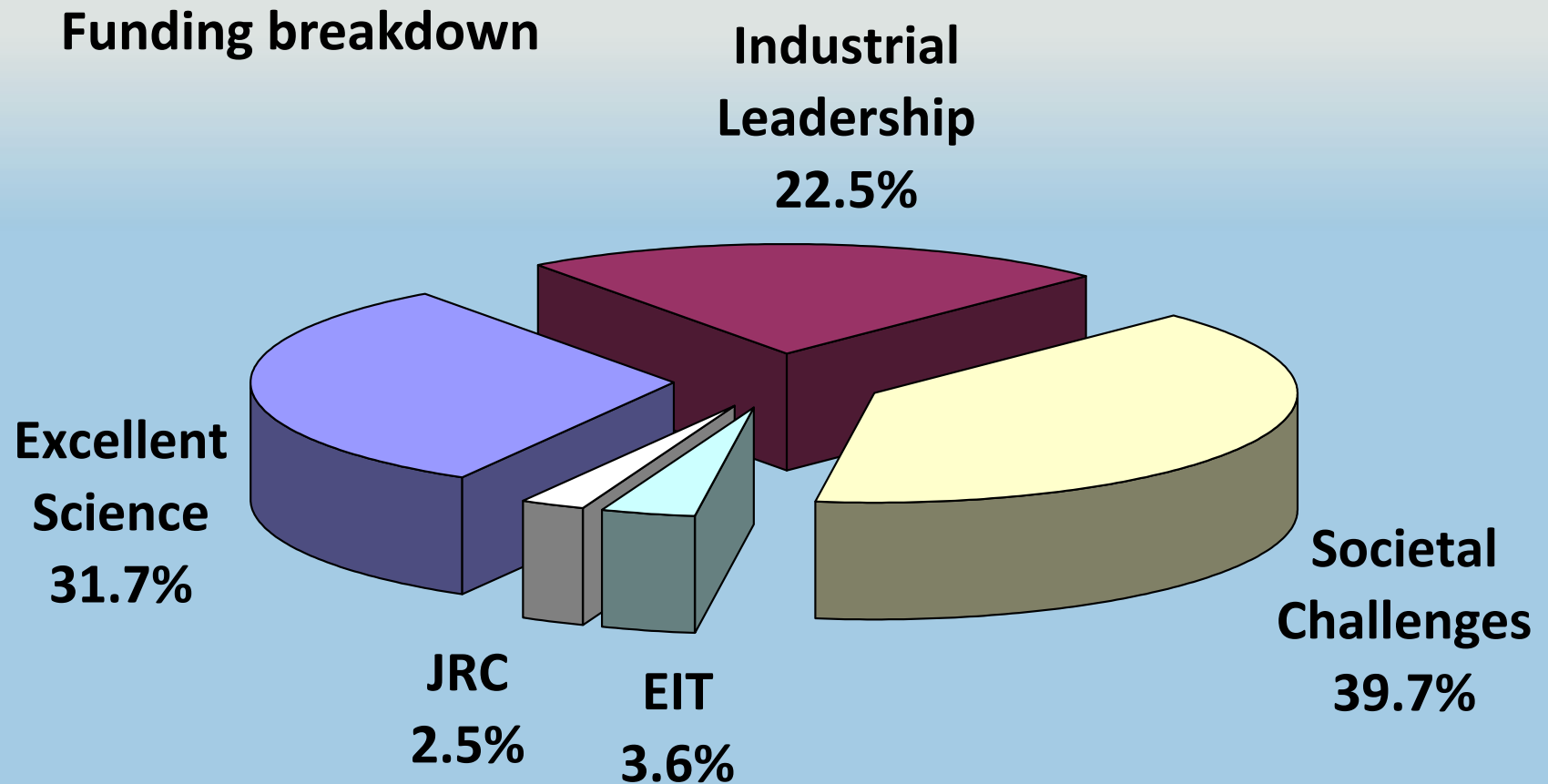
Societal challenges (€bn, 2014-20)

Health, demographic change and wellbeing	8.0
Food security, sustainable agriculture & the bioeconomy	4.2
Secure, clean and efficient energy (ex ITER and other nuclear under Euratom Treaty)	5.8
Smart, green and integrated transport	6.8
Climate action, resource efficiency and raw materials	3.2
Inclusive, innovative and secure societies	3.8

Water, Climate Change and Sustainable Development in Horizon 2020

WATER is strategic for EU competitiveness and industrial leadership and a grand societal challenge itself;

- JPI will seek to align EU and National and Regional programs/funds;
- EIP will accelerate innovation, by innovating sites, seeking for a mix of policy and tools (technological, financial, managerial);
- Mainstreaming of climate and sustainable development objectives across Horizon 2020 - of the overall Horizon 2020 budget, min. 60% to Sustainable Development and 35% to Climate Change



Activities for SMEs in Horizon 2020

All forms of R&D and all forms of innovation, towards exploitation and commercialisation

- SME participation in collaborative R&D or innovation projects (all three priorities)
- SME instrument (budget from all societal challenges as well as from the Leading Enabling Industrial Technologies LEITs)
- Innovation in start-ups, spin-offs and young companies (Eurostars and other measures)
- Access to risk finance (debt and equity facility)
- Exchange and mobility of researchers involving SMEs (Marie Curie actions)

SME instrument main features

- Targeted at all types of innovative SMEs
- Only SMEs allowed to apply for funding (single company support possible)
- Competitive
- Market-oriented, EU dimension
- Bottom-up while addressing societal challenges and/or key enabling technologies
- Grant-based staged funding

Simplification: summary

- **Single set** of simpler and more coherent participation **rules**.
- New **balance** between trust and control.
- Moving from several **funding rates** for different beneficiaries and activities to just two.
- Replacing the four methods to calculate overhead or "indirect costs" with a **single flat rate**. One single flat rate of 20% to cover indirect costs
- Major simplification under the **forthcoming financial regulation**
- **Successful applicants to get working more quickly:** reduction of average time to grant by 100 days (current average of around 350 days under FP7)



Benefits to the UK

Access to markets, knowledge, supply chains, networks

Helps spread costs where scale and resources required are too great for one MS

Provides up to 20% of HEIs' external research income

UK receives 15.0% of FP7 spend (second only to Germany)

UK participate in more projects than any other MS



Horizon 2020 budget/Multiannual Financial Framework (MFF)

- “UK’s top priority is budgetary restraint, thereby ensuring that the EU budget contributes to domestic fiscal consolidation.”
- “Growth and competitiveness, both of which are underpinned by innovation, are priority areas for the UK and should have proportionately larger share of a budget that, at most, increases by no more than inflation.”



Next steps: the inter-institutional debate unfolds

- Commission published Horizon 2020 proposals on 30 November 2011
- Council agreed 'Partial General Approaches' on Regulation May; on the Rules in October; and the Specific Programme in December 2012
- The ITRE Committee of Parliament proposed amendments in November 2012
- 'Trilogue' process underway (Commission, Council, European Parliament)
- The budgets for Horizon 2020 will be finalised following agreement by the European Council on the Multi-Annual Financial Framework.
- Final legislative acts expected at end of the year
- **Informal calls: mid-December**

Further information:

Expressions of Interest:

http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020-experts

http://ec.europa.eu/europe2020/index_en.htm

- Europe 2020 is the European Union's ten-year growth strategy. It is about more than just overcoming the crisis which continues to afflict many of our economies..

http://ec.europa.eu/research/innovation-union/index_en.cfm

- Europe's future economic growth and jobs will increasingly have to come from innovation in products, services and business models. .

www.ec.europa.eu/research/horizon2020

- Horizon 2020 is the financial instrument implementing the [Innovation Union](#) a [Europe 2020](#) flagship initiative aimed at securing Europe's global competitiveness.

<http://ec.europa.eu/resource-efficient-europe/>

- The flagship initiative for a resource-efficient Europe under the Europe 2020 strategy supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth.

Sign up for the e-bulletin

<http://www.betaeurope.co.uk/register.htm>

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Knowledge • Strategy • Innovation

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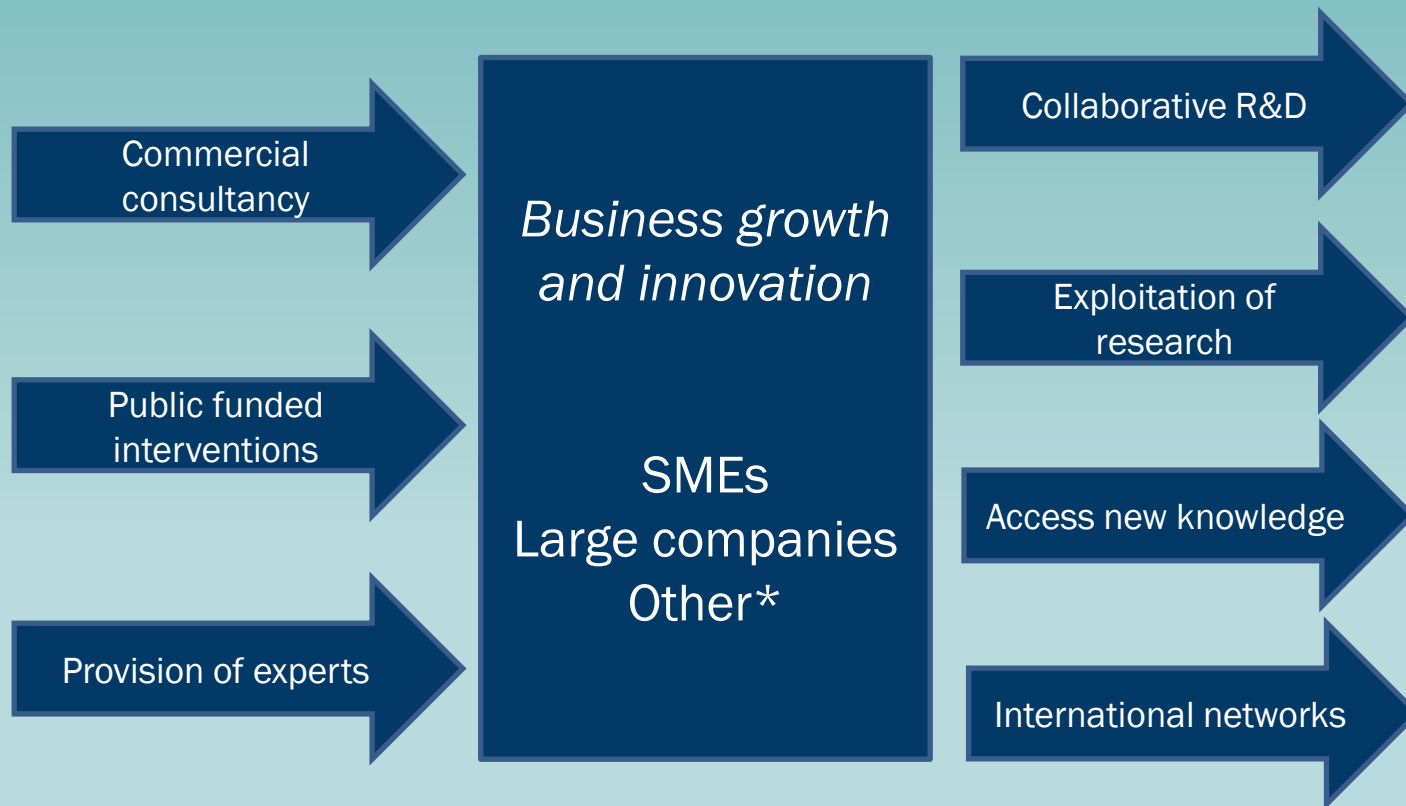
We provide specialist solutions to help businesses to grow and innovate.

Our clients include public sector and commercial clients.

We work internationally in Europe, Brazil and Australia.

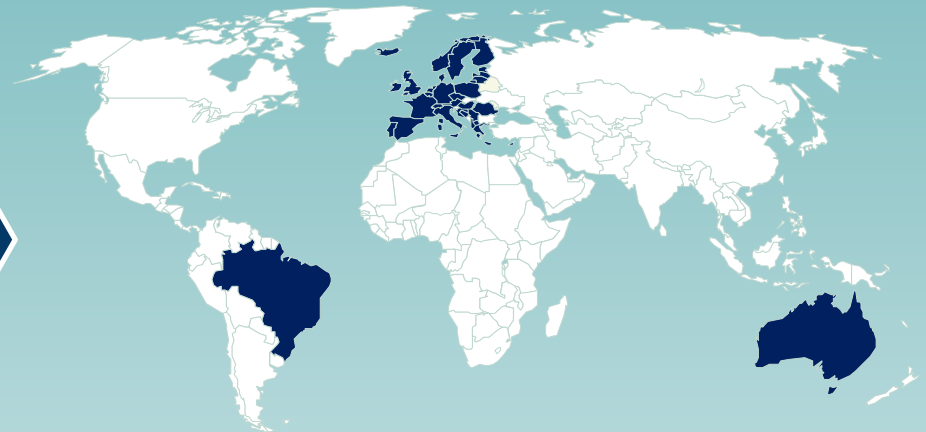


Core areas of expertise



* Universities, research centres, not for profit organisations

Our networks



Beta Technology activity in Brazil

- Long standing Brazilian client (over 30 years).
 - Supporting training activity in South America (EU funded MERCOSUR projects).
 - Developed a wide network of innovation and technology stakeholders in Brazil over the past two and a half years.
 - In the process of developing a strategic alliance with a local partner.
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Adding value to clients in Brazil

We can support companies and research organisations in Brazil to:

- Identify and access opportunities for international research collaborations, primarily in Europe.
 - Access technical specialists from across Europe in Key Enabling Technologies.
 - Access new markets and customers through specialist technical marketing support.
 - Identify and access potential inward technology transfer and investments into Brazil.
-



Case Study: CONCAWE Consultancy

Client: CONCAWE (The oil companies' European association for environment, health and safety in refining and distribution).

Activity:

- To deliver a report on recommended analytical methods to determine the quality of refinery effluents in support of EU legislation.
- Delivered with strategic partner the National Laboratory Service, with support of Beta Associate.



Case Study: Innovation strategy

Client: Global multinational (confidential).

Activity:

- Mapping areas of technical interest against funding opportunities.
- Identifying partners for collaboration.
- Innovation workshop to identify and prioritise strategic research projects.
- Development of FP7 proposal (successful).
- Support in recruitment of a project manager with FP experience.





Keep in touch.....

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