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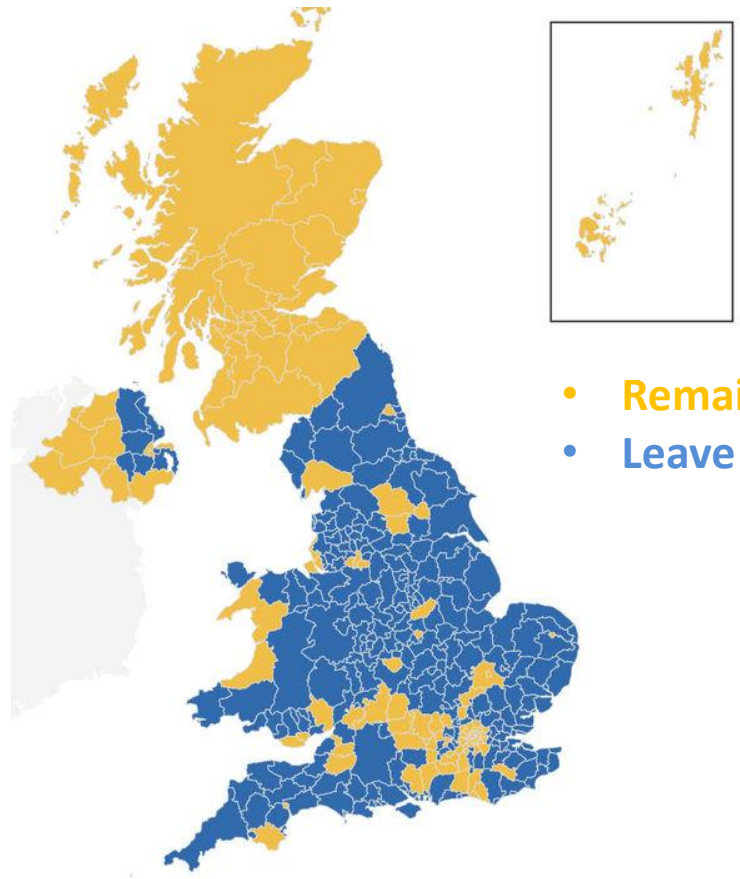
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Brexit - Potential Impacts on Biomedical Research

**Professor Dame Anne Glover FRS PRSE
University of Strathclyde
@AnneGlover_EU**

CELEBRATING 10 YEARS OF

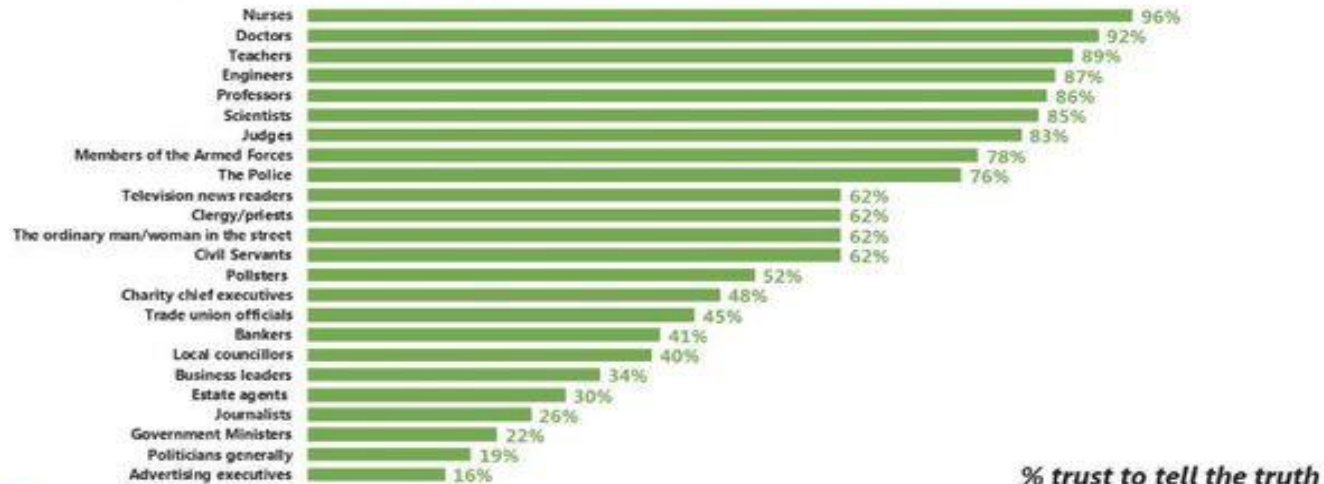
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Who do you believe?

Veracity Index 2018 – all professions

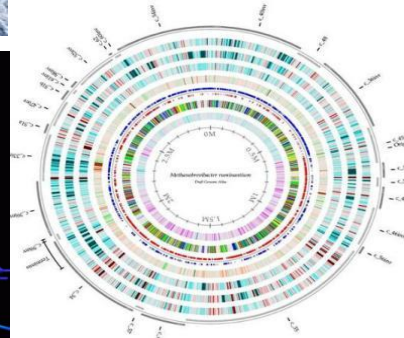
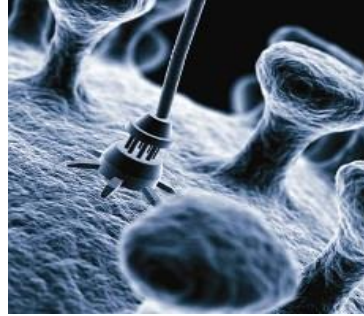
"Now I will read you a list of different types of people. For each would you tell me if you generally trust them to tell the truth, or not?"



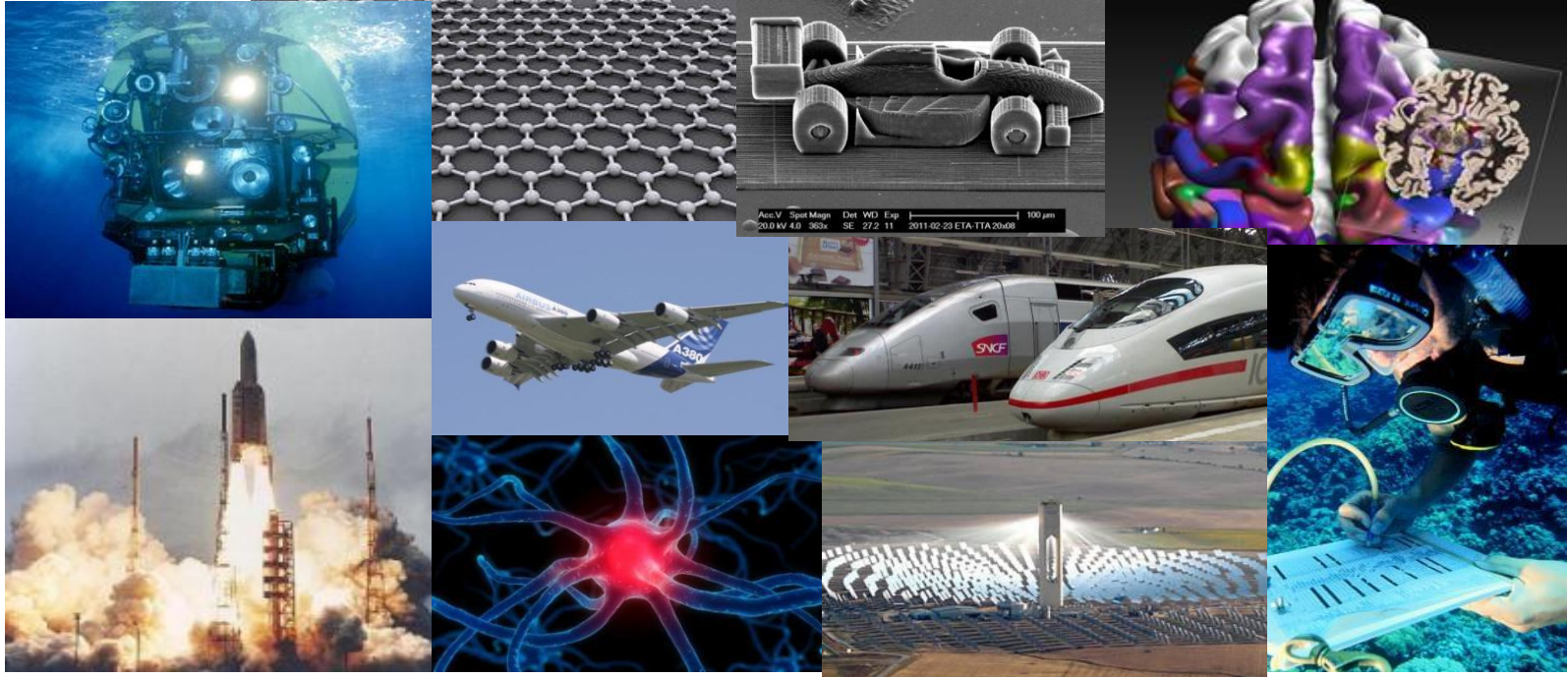
Base: 1,001 British adults aged 15+, fieldwork 12 - 21 October 2018

© 2018 Ipsos

The 21st Century: The Age of Biology



Europe is No. 1 in generating knowledge



EU research funding



Horizon Europe

Evolution of investment in research and innovation

throughout the
EU framework programmes

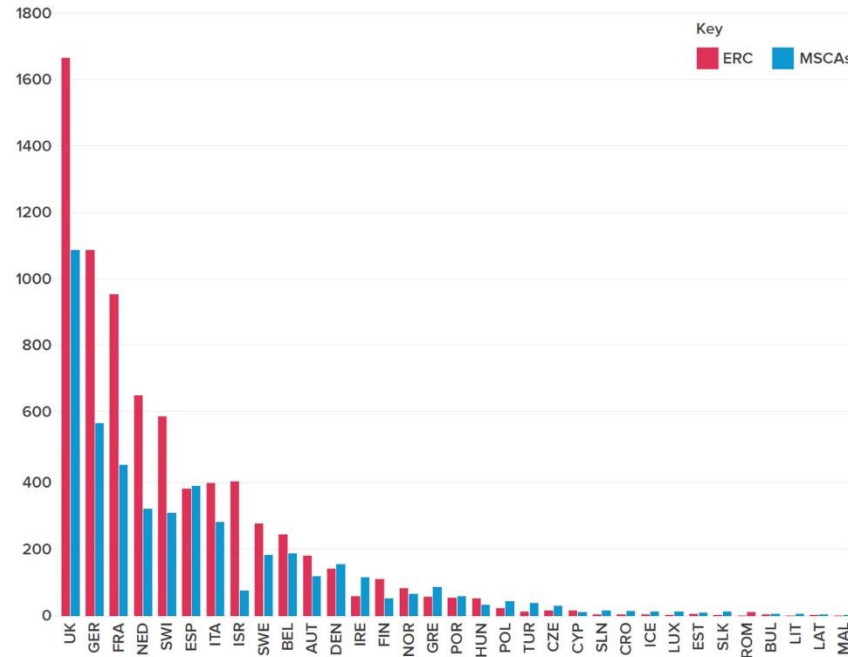


#HorizonEU #InvestEUresearch #EUBudget



European
Commission

We are very successful in UK at securing EU research funding



Alone or together?

- **Removing barriers to collaboration**
 - Framework programmes
 - Horizon2020
 - Horizon Europe
- A revolution in knowledge generation and application
 - harnessing talent from a pool of 500 million brains



EU Biomedical Research success



An app to keep heart patients active and independent



Using data to demystify sudden cardiac arrest



Microcapsules to deliver longlasting treatment for diabetes

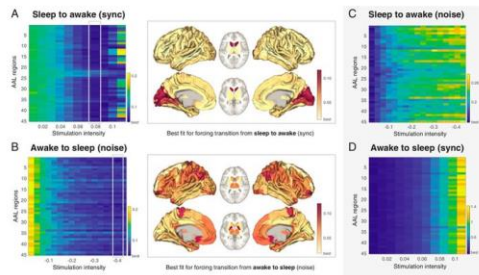
From European Commission

More to come - Human brain project, 2013-23



©Shadow Robot Company

Robots with more human hands



©Universities UPF, Aarhus, Oxford

Improving the precision of brain stimulation

What is at stake with Brexit?

Brexit



Driving success in biomedical research

- Attract the best in the world
- Provide world class infrastructure
- Foster smooth communication between sectors
 - Private
 - Public
 - Charity
 - Investment capital
- Build partnerships
- Offer opportunities/drive innovation

View from the British Medical Association

- Training and career opportunities for research-active doctors and academics are maintained or even enhanced
- Access to EU health-related research funding programmes is retained
- Development of new/improved medicines and medical devices in the UK continues at the current rate
- The UK's scientific reputation and appeal to researchers is at least maintained
- The UK's ability to translate research into medicines, and medical devices into products, is unrestricted
- The burden of conducting multi-centre clinical trials is minimised
- No unnecessary barriers to collaborative work, shared expertise, facilities and datasets are created
- Access to new medicines and devices for patients in the UK is maintained

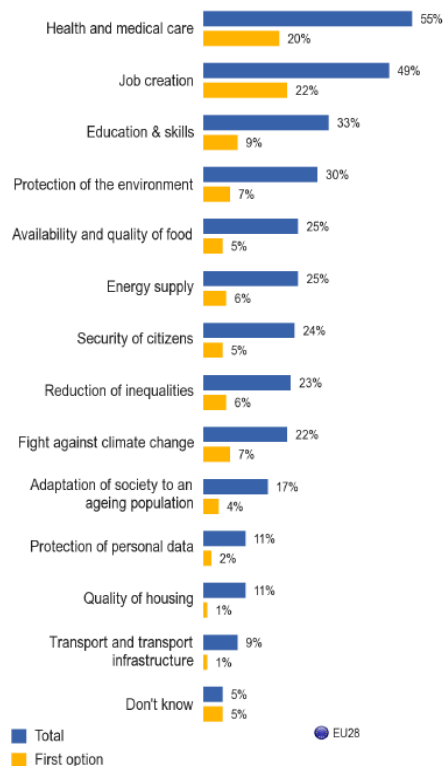
Clinical trials



- EU world leader in clinical trials
- >4,800 UK-EU clinical trials run 2004-16
- Patients in UK and EU benefit
- Of 200 trials funded by CRUK, 28% involve EU citizens
- UK patients may be disadvantaged
- May be future barriers to
 - Trade
 - Access to new medicines
 - Data
 - Funding

From Cancer research UK

QB3. Over the next 15 years, what should be the priorities when it comes to science and technological innovation?



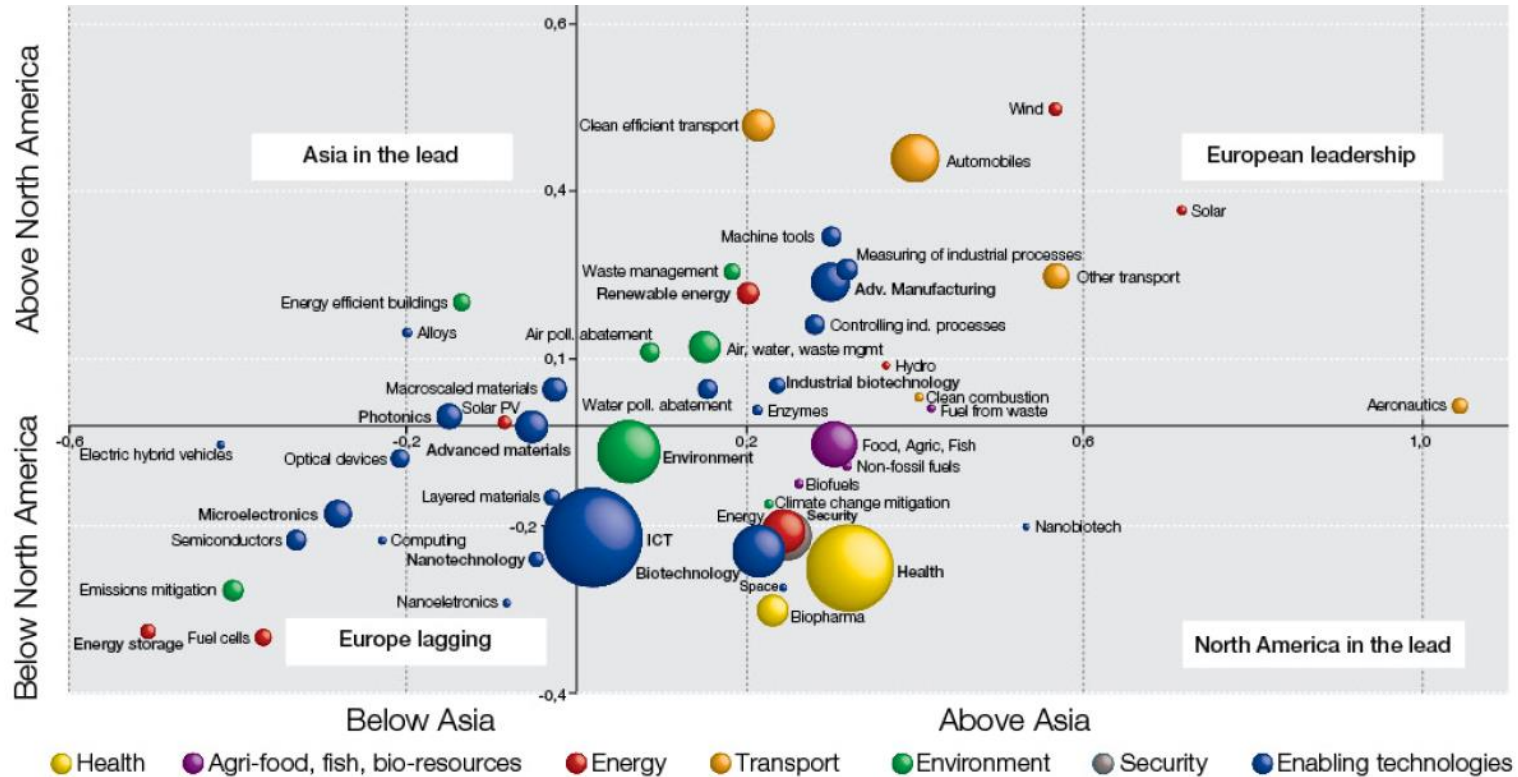
(MULTIPLE ANSWERS POSSIBLE)
Base: All respondents in EU28 (N= 27,910)

What do citizens want from future science, engineering and technology (SET)?

-health and medical care
- job creation

Source: Special Eurobarometer 419

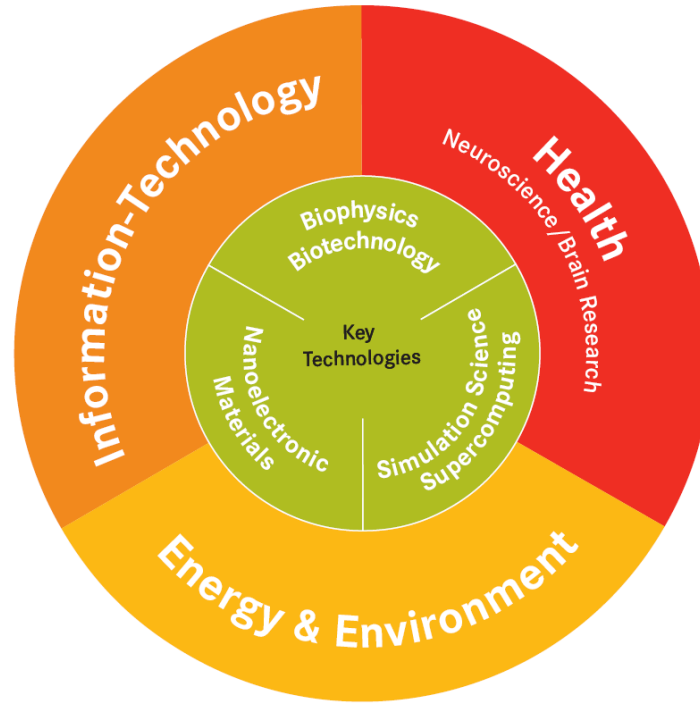
There is a lot of competition



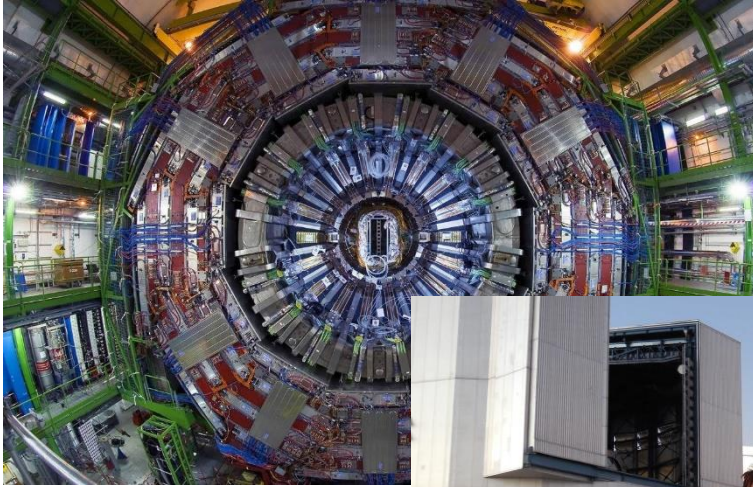
Leader or follower?

- Influencing EU biomedical research
- Accessing infrastructure
- Seamless collaboration
- Attracting the best minds
- Accessing funding and investment
- Being competitive

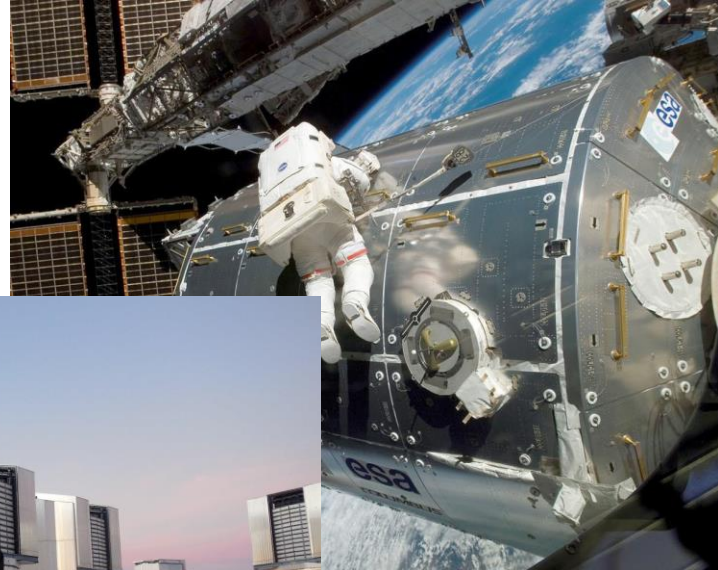
Unexpected benefits of collaboration



Big global collaboration



©CERN

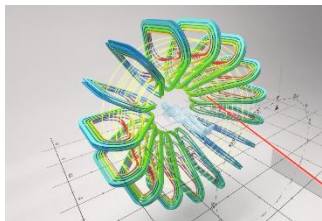


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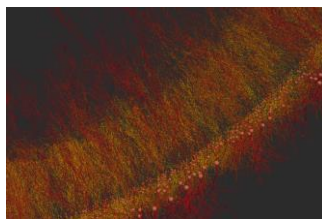


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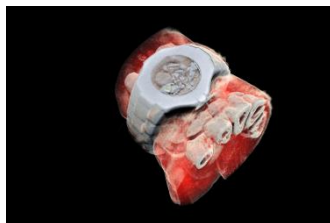
CERN impacts on biomedical research



A new “gantry” design using CERN magnet technology has the potential to revolutionise hadron therapy for cancer treatment



Sharing CERN’s expertise in big data with the biomedical community – a neurological cell simulation



First 3D colour X-ray of a human using CERN technology – finger bones white, soft tissue in red

Likely outcome for research in no deal scenario – “zero chance” of associate membership – Robert-Jan Smits



Photo: Luigi Mistrulli/Rex/Shutterstock

New research funding body, an immigration policy overhaul and money for a wide 'talent hunt' – Sir Adrian Smith



Photo: [University of London](#)

Queens speech 14th Oct 2019

- Establish UK as a world leader in scientific capability and space technology
- Increased investment in science
- New funding agency
- More open visa system
- Ambitious national space strategy

So – should we stay or should we go? (Clash 1982)

- In terms of research, there is no deal available which is as good as what we have
- Will investment in R&D be able to compete with other priorities post-Brexit?

Thank you – and good luck

[@AnneGlover_EU](#)

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Conference Dinner

A Scottish themed evening, bagpipe player, ceilidh dancing and DJ

Monday 14 October 2019

Old Fruit Market, 87–101 Albion Street,
Glasgow, G1 1NQ

Coaches depart hotel 18:30

Drinks Reception 19:00 – 19:45

Dinner and Entertainment 20:00 - late