

Summary note

London Medicine Horizon 2020 seminar

Summary

1. On the 11 January 2012 London Medicine, in collaboration with the Mayor's London European office, hosted a seminar in Brussels about Horizon 2020, the European Union's (EU) proposed new research funding framework for 2014-2020.
2. The purpose of the seminar was to provide delegates with an understanding of Horizon 2020 and to identify suggestions for how Horizon 2020 could enhance collaboration in health research across Europe.
3. The delegation represented higher education institutions, research organisations and industry from several European countries, including Belgium, France, Germany, the Netherlands and the UK. See Annex A for a list of those organisations which were represented at the seminar.
4. This summary note is divided into the following sections:
 - a. A summary of the presentations given by the European Commission
 - i. Overview of Horizon 2020
 - ii. Priority areas for health research
 - b. Policy points
 - c. Next steps
 - d. Topics raised during discussion
 - i. Process to influence Horizon 2020
 - ii. Creating innovation
 - iii. Health priorities and research
 - iv. Funding and budgets
 - v. Involvement of SMEs
 - vi. Collaboration
 - vii. Administration arrangements and processes

Policy points

5. Based on the topics raised in the discussion, several policy points can be outlined. These are:
 - a. The budget for Horizon 2020 has not yet been approved. It is important to continue to make the case for investment in research;
 - b. Horizon 2020 places great emphasis on using established innovations and SMEs. More emphasis should be put on technology transfer, enabling research to create innovation and;
 - c. EU research that produces promising patents should have some support mechanism to help achieve commercialisation.
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Next steps

6. London Medicine will seek to influence Horizon 2020 by:
 - a. Writing to the UK government and MEPs in support of continued investment in research at the European level;
 - b. Seeking to influence the advisory group responsible for providing the detail in *Horizon 2020* for the *Health* research priorities and the corresponding budgets and;
 - c. Providing the European Commission case studies about the successes and challenges in London HEI/SME research collaborations to inform their policy in this area.
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Summary of European Commission presentations

Overview of Horizon 2020

7. Horizon 2020 is part of the EU's *Multiannual Financial Framework 2014-2020* which seeks to address the key challenge of stabilising the financial and economic system, taking steps to create economic opportunities.
8. Horizon 2020 is the EU's proposed new research funding framework for 2014-2020. It brings together three previously separate programmes: the 7th research Framework Programme (FP7), innovation aspects of the Competitiveness and Innovation Framework Programme (CIP) and, the EU contribution to the European Institute of Innovation and Technology (EIT).
9. The proposed budget for Horizon 2020 is €90.4 billion (current prices).
10. The three main priorities for Horizon 2020 are: excellent science; industrial leadership and; societal challenges.

11. Six societal challenges have been prioritised, these are:
 - a. Health, demographic change and wellbeing;
 - b. Food security, sustainable agriculture, marine and maritime research and the bio-economy;
 - c. Secure, clean and efficient energy;
 - d. Smart, green and integrated transport;
 - e. Climate action, resource efficiency and raw materials;
 - f. Inclusive, innovative and secure societies.

12. Horizon 2020 proposes considerable difference to FP7 in order to simplify the rules and processes, including:
 - a. A single set of rules covering all research programmes and funding bodies;
 - b. One project will have only one funding rate, this will be a maximum of 100% of direct costs (except for actions close to market, where a 70% maximum will apply);
 - c. Fewer, better targeted controls and audits;
 - d. An aim to reduce time to grant by an average of 100 days;
 - e. Improved rules on intellectual property.

13. There will be a greater emphasis than previous frameworks on innovation – creating economic growth.

14. There will be greater emphasis on multi-disciplinary and multi-sector research, in particular to address the societal challenges.

15. Horizon 2020 will look to leverage greater finance from the private sector, both in debt sharing and equity.

16. The next steps are for negotiations to take place within the European Parliament and Council over the Horizon 2020 proposals and budget. Adoption of the necessary legislative acts is anticipated to take place in mid-2013 ready for the launch of Horizon 2020 in January 2014.

Priority areas for health research

17. The *Health, demographic change and wellbeing* challenge has the largest proposed budget of the six societal challenges - €9,077 million.

18. The *Health, demographic change and wellbeing* societal challenge has been prioritised in order to address:

- a. the challenges of: an ageing population; the need to understand disease and personalised medicine; the chronic and infectious disease burden; drug development and;
 - b. The increasing cost of health expenditure per capita.
 19. There is also evidence which shows that investing in health research creates growth, in particular in skilled jobs in high-value-added sectors.
 20. Priority areas for the *Health* challenge have been outlined, although budgets have not yet been assigned to these yet. The priority areas for *Health* are:
 - a. Understanding the determinants of health (including environmental and climate related factors), improving health promotion and disease prevention;
 - b. Developing effective screening programmes and improving the assessment of disease susceptibility;
 - c. Improving surveillance and preparedness;
 - d. Understanding disease;
 - e. Developing better preventive vaccines;
 - f. Improving diagnosis;
 - g. Using in-silico medicine for improving disease management and prediction;
 - h. Treating disease;
 - i. Transferring knowledge to clinical practice and scalable innovation actions;
 - j. Better use of health data;
 - k. Improving scientific tools and methods to support policy making and regulatory needs;
 - l. Active ageing, independent and assisted living;
 - m. Individual empowerment for self-management of health;
 - n. Promoting integrated care;
 - o. Optimising the efficiency and effectiveness of healthcare systems and reducing inequalities through evidence based decision making and dissemination of best practice, and innovative technologies and approaches.
 21. These priorities have not been made disease specific. Horizon 2020 will be taking an approach of setting out what the problems are and making calls that ask for solutions.
 22. The next part of the process is to negotiate the budget for the *Health* challenge and, through engagement with stakeholders, develop the detail that will determine what calls will be made to address each of the *Health* priorities.
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The following points were raised in discussion.

Process to influence Horizon 2020

23. *What is the process for commenting on the Horizon 2020 proposals?* The consultation for the proposals took place in 2011, when lots of feedback was received. As Horizon 2020 is now at the stage of European Parliament and Council negotiations the opportunity to influence it is through national governments and MEPs. Vertical services within the Commission e.g., Health, will be looking for advice on appropriate candidates to sit on their Committees which will help determine the research priorities.

Creating innovation

24. *There is a lot of emphasis in Horizon 2020 on taking advantage of already established innovations and SMEs. Could more emphasis be placed on technology transfer, enabling research to create innovation?*
25. *As Horizon 2020 aims to create more commercialisation it would be helpful to have some mechanism that supports patents, which are the outcome of completed EU funded research, to achieve this.*

Health priorities and research

26. *There is a large budget for the Health challenge yet most of the priorities seem very broad. It would be helpful to have more details about the specific calls. Horizon 2020 is still being negotiated, both the budgets and the details within the various priorities. Once there is greater clarity on the budget, more detail will be given to the Health priorities and specific calls.*
27. *Is there an opportunity to influence the detail in the current Health priorities?* An advisory group will be created within the Health unit at the Commission to determine this detail. This would be the appropriate body to influence on this matter.
28. *It is important that interdisciplinary teams are actually working as a group, contributing to the overall research and not just in their areas of expertise. This is particularly important for social and informal care research.*

Funding and budgets

29. *What was the UK government reaction to the proposed budget for Horizon 2020?* The UK government is keen to reduce the EU budget but does see the benefits to growth from research. The Commission will be using fresh evidence from an impact study linking health research to increasing growth and employment to create support for the budget.
30. *As there will be an increase in direct funding for projects, and greater emphasis on innovation, will this mean there will be less projects funded overall?* Analysis undertaken by the Commission

suggests that there will not be a significant change in the number of projects funded. The percentage of direct costs projects that are funded may decrease over time. There will also be some projects that, due to their nature, will inevitably receive less than 100% direct cost funding.

Involvement of SMEs

31. There will be small grants available for single SME projects within the societal challenge budget. These will be for feasibility studies and support for commercialisation. This single SME project grant and some of the other new types of grant are being trialled in the final tranche of FP7 calls. This will help ease the transition and ensure there is no funding gap between the two frameworks.
32. *Will UK SMEs still have to find international partners or will they be able to partner with other UK organisations?* With a few exceptions e.g. single SME projects and European Research Council grants, UK SMEs will have to find international partners to work with.
33. *What support will there be to ensure SMEs are able to participate effectively as well as be informed of opportunities?* The European Enterprise project has a responsibility to support SMEs to access Horizon 2020 opportunities. There will be a single web portal to serve this purpose. It is anticipated that as more research funding from Horizon 2020 will be targeted to commercialisation and innovation, this in itself will help to involve SMEs more in the opportunities.
34. *Considering the current economic climate are there concerns that it will be difficult to get SMEs involved in these types of research projects, hence take-up of opportunities may be low?* Many projects will not require SME participation.
35. *Involvement of SMEs in EU research projects can be problematic. Has there been a decline in the number of grants taken up since introducing the requirement for SMEs?*

Collaboration

36. *Will there still be the requirements to have multiple partners in EU funded projects?* For most grants the requirement will be for three countries to be involved. There will be some exceptions, for example single SME projects and European Research Council grants, which are single team projects.
37. *Will there still be the requirement to have SMEs collaborating on projects?* There will be some projects that will require SMEs, but Horizon 2020 does not propose a quota for projects involving an SME. Calls will be evaluated on their excellence so collaborations should focus on finding partners with the right skills, regardless of the type of organisation they are.

38. *It can be quite challenging bringing together international partners to collaborate on a project in the timeframe given to respond to a call. Perhaps shifting the time of year calls are made would help.*
39. *Working in multi-national teams can be a real pleasure. Once a successful collaboration has been established between partners they will often work together again on future projects.*
40. *It would be helpful to have a faster process for changing partners in projects that are established (and have been awarded a grant).*
41. *Simplifying the process for clinical trials is important for enabling successful collaborations. What action is taking place to address this? DG SANCO is currently looking into this.*

Administration arrangements and processes

42. *How will Horizon 2020 be able to reduce the time to grant by an average of 100 days? The amount of documents required and checks undertaken for each grant will be reduced. Presently grant applications need to go through an approval process at member state committees before they can be accepted; it is hoped this stage of the process will be removed.*
43. *Will there be changes within the Commission reflecting the new structures and processes of Horizon 2020? No decisions have been made yet, but this is certainly possible. The Commission is interested in reducing its number of staff.*
44. *If Horizon 2020 seeks to encourage bottom up calls, will there not be any top down calls as has been the style in previous frameworks? There will be top down calls. Horizon 2020 is likely to encourage bottom up calls by setting out broader calls with problems, looking for bottom up solutions to them.*
45. *Will DG SANCO be part of Horizon 2020? No, efforts are being made to ensure the interface between DG SANCO and Horizon 2020 is clear.*
46. *Interdisciplinarity is being stressed in this framework, how will this be assessed? The Commission is aware that this will be a challenge and is considering the best ways to undertake it.*

Annex A

1. Representatives present at the London Medicine seminar about Horizon 2020 held on the 11 January 2012 were from the following organisations:
 - a. Academic Medical Centre, University of Amsterdam (the Netherlands)
 - b. Barts and The London School of Medicine and Dentistry (UK)
 - c. Brunel University (UK)
 - d. Catholic University of Leuven (Belgium)
 - e. Directorate-General Research and Innovation, European Commission (EU)
 - f. European Molecular Biology Laboratory - European Bioinformatics Institute (Germany/UK)
 - g. Imperial College London (UK)
 - h. INSERM (France)
 - i. King's College London (UK)
 - j. Leiden University Medical Centre (the Netherlands)
 - k. London BioScience Innovation Centre (UK)
 - l. London Higher (UK)
 - m. London's European Office (Belgium/UK)
 - n. Max Planck Institute of Biochemistry (Germany)
 - o. St George's, University of London (UK)
 - p. UCL (UK)