

Horizon 2020 'Health, demographic change and wellbeing'



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Building on experience

FP7 'Health' – the largest multi-national fund...

- …for collaborative research, global consortia, and publicprivate co-operation
- ...to fund excellent applied health and ageing research and innovation
- ...to bring together leading players from Europe and across the globe
- ...to tackle key European and global health challenges



What is Horizon 2020



The EU's 2014-20 programme for research & innovation

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's 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 European society e.g. health and ageing, clean energy and transport
- Simplified access, for all companies, universities, institutes in all EU countries and beyond

^{*} The 7th Research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)



Three priorities





Excellent science

Proposed funding

(million EUR, 2014-2020)

European Research Council (ERC)	
Frontier research by the best individual teams	13 095
Future and Emerging Technologies	
Collaborative research to open new fields of innovation	2 696
Marie Skłodowska-Curie actions (MSCA)	
Opportunities for training and career development	6 162
Research infrastructures (including e-infrastructure)	
Ensuring access to world-class facilities	2 488



Industrial leadership

Proposed funding

(million EUR, 2014-2020)*

Leadership in enabling and industrial technologies (LEITs) (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 557
Access to risk finance Leveraging private finance and venture capital for research and innovation	2 842
Innovation in SMEs Fostering all forms of innovation in all types of SMEs	616 + complemented by expected 20% of budget of societal challenges + LEITs and 'Access to risk finance' with strong SME focus

^{*} All funding figures in this presentation are subject to the pending Multiannual Financial Framework Regulation by the EP and the Council



Societal challenges

22% increase

Proposed funding

(million EUR, 2014-2020)

Health, demographic change and wellbeing	7 472
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy	3 851
Secure, clean and efficient energy	5 931
Smart, green and integrated transport	6 339
Climate action, environment, resource efficiency and raw materials	3 081
Inclusive, innovative and reflective societies	1 310
Secure societies	1 695
Science with and for society	462
Spreading excellence and widening participation	816



Strategic Initiatives



Innovative Medicines Initiative 2
www.imi.europa.eu



European Innovation Partnership on Active and Healthy Ageing

https://webgate.ec.europa.eu/eipaha



Active and Assisted Living 2

www.aal-europe.eu



European & Developing Countries
Clinical Trials Partnership (EDCTP2)

www.edctp.org



The challenges



- Ageing population
- Increased disease burden
- Unsustainable and unequal health & care systems
- Health & care sector under pressure to reform



Horizon 2020 - Societal Challenge 1



- Translating science to benefit citizens
- Improve health outcomes
- Support a competitive health & care sector
- Test and demonstrate new health & care models, approaches and tools
- Promote healthy and active ageing

Do also look elsewhere! EU support of health related research & innovation is not limited to Societal Challenge 1





A new approach



Challenge-driven

Broad topics

Less prescriptive topic texts

Two-year work programme

Stronger focus on end users





More opportunities for SMEs



- Integrated approach around 20% of the total budget for societal challenges and LEITs to go to SMEs
- **Simplification** of particular benefit to SMEs (e.g. single entry point)
- A new SME instrument will be used across all societal challenges as well as for the LEITs
- A dedicated activity for research-intensive SMEs in 'Innovation in SMEs'
- 'Access to risk finance' will have a strong SME focus (debt and equity facility)



Europear

Getting you started faster

- Single set of simpler and more coherent participation rules
- New balance between trust & control
- Just two funding rates for different beneficiaries and activities
- Single flat rate to calculate overhead or «indirect costs»
- Forthcoming financial regulation will make things simpler
- time-to-grant of 8 months
 (exceptions for the ERC and in duly justified cases





International cooperation

- A priority
- Key goal: enhancing and focusing international cooperation in terms of areas and partners
- Horizon 2020 is open to participation from across the world
- Wanted: more involvement of international partners!
- Targeted actions across the entire programme
- Horizon 2020 Regulation and Rules for Participation apply





General opening

- Horizon 2020 is open to participation from across the world
- Automatic funding:
 - Member States (including overseas departments and overseas territories)
 - Associated Countries
 - exhaustive list of countries in annex to work programme (but: no longer BRIC + Mexico in this list!)
- Participants from other countries only funded in exceptional cases:
 - when provision is made in the call text
 - bilateral agreement (e.g. Health challenge NIH)
 - when the Commission deems it essential (case by case assessment)





Targeted actions

- Targeted international cooperation activities across Horizon 2020: area for cooperation and partner specified upfront
- Areas identified based on analysis of a set of criteria to ensure common interest and mutual benefit:
 - Research and innovation excellence
 - Framework conditions/access to markets
 - Contribution to international commitments
 - Frameworks to engage in cooperation and lessons learned
- Differentiation by countries/regions: enlargement/ neighbourhood/EFTA, industrialised and emerging countries, developing countries
- International cooperation as part of strategic planning for each part of Horizon 2020
- Result: roadmaps for international cooperation with international partners (to be published early 2014)





Implementation in Horizon 2020

Regular calls for proposals:

- topics inviting projects where third country participation is required and/or encouraged
- topics stimulating networking between existing projects

Joint initiatives of Union and third countries:

- bilateral coordinated/joint calls
- multi-lateral initiatives
- contribution of Union to third country/international organisations
- ERA-Net





Societal Challenge 1 "Health, Demographic Change and Wellbeing" call 2014-2015

Al information about the published or future calls can be found at:

http://ec.europa.eu/research/participants/portal/desk top/en/opportunities/index.html

The call for 2014-2015 has been published on December 11, 2013. The two-stage submission call has been launched and the first stage evaluations have taken place with the results having been acknowledged to the applicants. Deadline for submission of the second stage proposals is August 19, 2014.



SC1 Call 2014-2015

HORIZON 2020 - WORK PROGRAMME 2014-2015

Health, demographic change and wellbeing

Personalising health and care
Understanding health, ageing and disease
PHC 1 – 2014: Understanding health, ageing and disease: determinants, risk factors and pathway
PHC 2 – 2015: Understanding diseases: systems medicine
PHC 3 - 2015: Understanding common mechanisms of diseases and their relevance in co- morbidities
tegrated, sustainable, citizen-centred care
PHC 23 - 2014: Developing and comparing new models for safe and efficient, prevention
oriented health and care systems:
PHC 24 – 2015: Piloting personalised medicine in health and care systems
PHC 25 - 2015: Advanced ICT systems and services for Integrated Care
PHC 26 - 2014: Self-management of health and disease: citizen engagement and mHealth 37
PHC 27 – 2015: Self-management of health and disease and patient empowerment supported by ICT

Co-ordin	ation activities
	0 1 – 2014: Support for the European Innovation Partnership on Active and Healthy Ageing
	2 – 2014: Joint Programming: Coordination Action for the Joint Programming Initiative "More Years, Better Lives - the Challenges and Opportunities of Demographic Change" 62
	03 – 2015: Support for the European Reference Networks: Efficient network modelling and lation
HCC	0 4 – 2014: Support for international infectious disease preparedness research
	0 5 – 2014: Global Alliance for Chronic Diseases: prevention and treatment of type 2 etes
Other ac	ztions
НО	A $1-2014/2015$: Subscription fee: Human Frontier Science Programme Organisation 89
	A $2-2014/2015$: Tenders for programme evaluation, studies and impact assessment and for ferences, events and outreach activities
нол	A 3 – 2014/2015: Presidency events - eHealth90
НО	A $4-2014/15$: Independent experts assisting in proposal evaluations and project reviews 90
HO	A 5 - 2014: Grant to the Global Alliance for Chronic Diseases90



Examples of the topics

$PHC\ 1-2014$: Understanding health, ageing and disease: determinants, risk factors and pathways

<u>Specific challenge:</u> The development and preservation of good health, and the occurrence and evolution of common diseases and disabilities result from varying degrees of interaction between the genetic make-up of individual human beings and behavioural, environmental (including endocrine disruptors), occupational, nutritional and other modifiable lifestyle factors. This applies from the earliest stages of development throughout life.

Understanding these factors, their interactions and the extent to which they contribute to health preservation and/or to disease development is important for the development of preventive and therapeutic measures supporting good health, prolonged active independence and a productive working life, not least in the context of changing demographic patterns and the ageing of the European population. In particular, proposals should contribute to improving risk identification and validation, and will allow better diagnosis, risk-based prevention strategies and policies.

Scope:

EITHER:

. The identification of health trends and determinants, their validation, and the validation of risk factors for disease and disability, through the generation, integration and validation of data derived from relevant disciplines (e.g. molecular, behavioural, nutritional, clinical, social and environmental epidemiology; exposure sciences; genetics, epigenetics, etc.). This should involve the exploitation of existing cohorts and longitudinal studies and the assessment of the necessity to establish new ones, as well as where relevant, the valorisation of knowledge gained from population-based bio-banks.

OR:

i. The identification of determinants and pathways characteristic of healthy and active ageing (from early stages of development onwards) and of health deterioration caused by time, disease accumulation and the abovementioned risk factors and their interactions.

In both cases, sex and gender differences should be taken into account.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

PHC 13 - 2014: New therapies for chronic non-communicable diseases

<u>Specific challenge</u>: Chronic non-communicable diseases represent a significant burden on individuals and healthcare systems. Innovative, cost effective therapeutic approaches are required to provide the best quality of care when prevention fails. While a considerable amount of knowledge has been generated by biomedical research in recent years, the development of new therapies is stagnating, in part due to a lack of clinical validation.

Scope: Clinical trial(s) supporting proof of concept in humans to assess the potential clinical efficacy of the novel therapeutic concept(s) and / or optimisation of available therapies (e.g. drug repurposing). The application may build on pre-existing pre-clinical research and additional results from large scale databases. A concise feasibility assessment justified by available published and preliminary results and supporting data should also be provided. Considerations of effectiveness and potential clinical benefit (possibly including real world data) should be integrated in the application if relevant.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 6 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: This should provide:

- New therapeutic strategies, adapted where relevant to the differing needs of men and women, with the highest potential to generate advances in clinical practice for chronic diseases, including multi- or comorbidity, ready for further development.
- · Early exclusion of candidate strategies unlikely to succeed.
- Contribute to the improvement of the therapeutic outcome of major chronic health issues with significant impact on burden of diseases both for individual patients and for health care systems.

Type of action: Research and innovation actions



2015 Calls and general conditions

TOPICS OPEN IN 2015

PHC 2 – 2015: Understanding diseases: systems medicine
PHC 3 - 2015: Understanding common mechanisms of diseases and their relevance in comorbidities
Effective health promotion, disease prevention, preparedness and screening
PHC 4 – 2015: Health promotion and disease prevention: improved inter-sector co-operation for environment and health based interventions
PHC 5 – 2014: Health promotion and disease prevention: translating 'omics' into stratified approaches
PHC 9 – 2015: Vaccine development for poverty-related and neglected infectious diseases: HIV/AIDS
PHC 11 – 2015: Development of new diagnostic tools and technologies: in vivo medical imaging technologies
PHC 14 – 2015: New therapies for rare diseases
PHC 18 – 2015: Establishing effectiveness of health care interventions in the paediatric population
PHC 22 – 2015: Promoting mental wellbeing in the ageing population32
integrated, sustainable, citizen-centred care
PHC 23 – 2014: Developing and comparing new models for safe and efficient, prevention oriented health and care systems:

CONDITIONS FOR THE CALLS (Work Programme 2014-2014 p. 54)

	2014	2015	
	EUR million	EUR million	
PHC 1 - 2014	54.00		Two stage
PHC 2 - 2015		36.00	Two stage
PHC 3 - 2015		30.00	Two stage
PHC 4 - 2015		18.00	Two stage
PHC 5 - 2014	24.00		Two stage
PHC 6 - 2014	15.00		Two stage

PHC 10 - 2014	48.00		Two stage
PHC 11 - 2015		47.00	Two stage
PHC 12 - 2014	66.10	45.00	SME instrument
/2015	out of which	Out of which	
	6.61 for phase 1	4.50 for phase 1	
	58.17 for phase	39.60 for phase 2	
	2	0.90 for	
	1.32 for	mentoring and	
	mentoring and	coaching support	
	coaching	and phase 3	
	support and		
	phase 3		
	Single stage for both phase 1 and phase 2.		

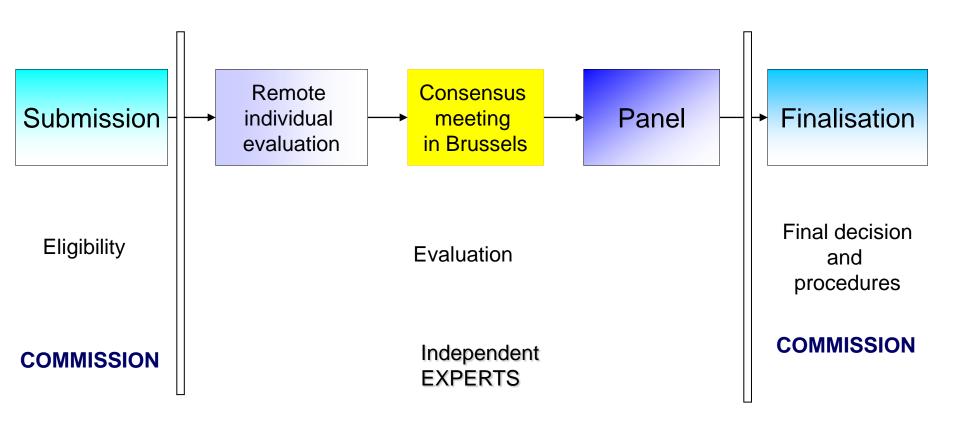


Stage 1 evaluation process – simplified approach

Evaluators SEP / Commission staff Invitation letter without "Consensus" **Evaluation** Final list of all Report Individual **Summary** proposals at and Report (ESR) Receipt of above thresholds Median scores for each evaluation to be sent to criterion and related to be invited for stage proposals applicants standard phrase Rejection letter with Individual **Evaluation Evaluation** Summary Reports Report (ESR) to be sent to Eligibility check done applicants remotely Allocation of proposals to evaluators Mathematical median score for each criterion



Overview of the Evaluation process 2nd Stage





Consensus meetings

(in Brussels)

Evaluators meet to:

Discuss on basis of all individual assessment reports (including absent evaluators)

Agree on consensus marks and comments for each criteria. These must be aligned:

- >positive comments for high score
- > negative comments for low score

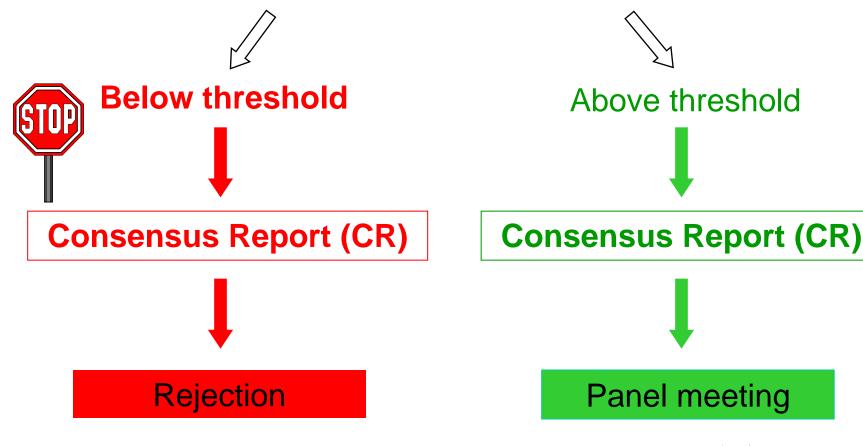
Give clear explanations for proposed changes (if any)

Only proposals passing all thresholds go to the next step (panel meeting for ranking).



Consensus meeting

Consensus meeting outcome





Consensus meetings Role of the "rapporteur"

One evaluator will be nominated as rapporteur for each proposal. He/she will:

- →Ensure that IARs of absent remote evaluators are taken into account
- → Note the consensus marks and comments in the Consensus Report (CR)
- → Circulate and draft the CR with the other evaluators, signs it and ask for signature of the moderator
- → Finalise the consensus report in RIvET only when agreed and approved by Commission moderator



Invitation to register and become an expertevaluator

HOW TO REGISTER AS AN EXPERT

The registration in the EC experts' database is essential for the Commission services to be able to issue an invitation to evaluate submitted proposals or to review ongoing projects. Without the valid registration the EC services **will not be able** to produce your contract.

To register you need to go to the Participant Portal

http://ec.europa.eu/research/participants/portal/desktop/en/home.html

The registration is two-tier:

- 1) creation of an ECAS account (used also for other roles, for example a project coordinator)
- 2) registration as an expert.

1) ECAS account

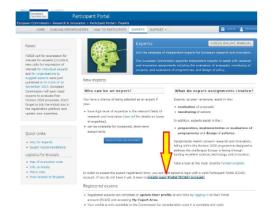
You can create en ECAS European Commission's secure Authentication Service) account either by clicking on the 'register' button on the right hand side of the page



or by going to the experts tab

http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html

and clicking on Create your Portal (ECAS) account at the bottom of the page.

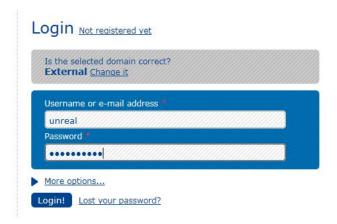


Once this is done, go back to the Expert area in the Participant Portal,

http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html

and log-in with your ECAS user name or email address and password by clicking on the Login button on the right hand side of the page



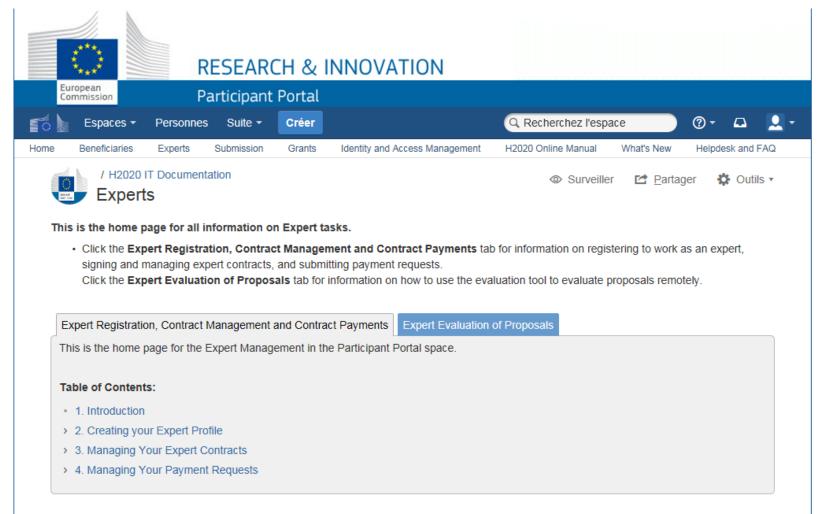


After a successful login you will be able to see your name where the Login button used to be.





https://webgate.ec.europa.eu/fpfis/wikis/display/ECResearchGMS/Experts





→ Equality of treatment:

all the proposals should be treated alike, considering only their merits.

- → Input for proposal rejection or contract negotiation The comments associated with the scores are vital. To justify marks, help applicant understand, but also, if applicable, as means of improving successful proposals during negotiation.
- Selecting high quality: proposals selected for funding must demonstrate high scientific, technical and managerial quality.

As an evaluator, you must follow the "Code of Conduct for independent experts appointed as evaluators"

You **provide an impartial and clear opinion** on each proposal, and a <u>prioritisation</u> among them.

You must be:

- Independent: represent yourself, not your employer, or your country...
- Objective: evaluate the proposal as written
- → Accurate: use the official evaluation criteria only
- → Consistent: apply the same standard of judgment to each proposal
- → Incommunicado: respect strict confidentiality on the proposals, the whole evaluation process and results, during and after the evaluation!

A global list of FP7 evaluators is published yearly on CORDIS

EUROPEAN / European / Health & COMMISSION / Research Area / life sciences

Confidentiality: the first principle of evaluation

No information, results of the evaluation or documents should be communicated to anyone outside the consensus group.

Make sure that you delete all proposals and related information on your computers and/or destroy all paper copies.

NOT TO IGNORE – A VERY GOOD REIMBURSEMENT FOR YOUR WORK

Definition provided with appointment letter:

→ Disqualifying COI

- · Involved in preparation of proposal
- Stands to benefit directly
- · Close family relationship
- Director/trustee/partner
- Employee (<u>but</u>, see exception...)
- Member of Advisory Group
- Any other situation that compromises impartiality

→ Potential COI

- Employed by applicant in last 3 years
- Involved in research collaboration in previous 3 years
- Any other situation that casts doubt...
 or that could reasonably appear to do so...





Thank you for your attention!

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Find out more:
www.ec.europa/research/horizon2020