Fördermöglichkeiten für *innovative öffentliche Beschaffung* im Forschungsrahmenprogramm der EU **HORIZONT 2020**

Zeitraum 2018-2020

DLR Projektträger

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Vorbemerkung

Innovationsorienterte öffentliche Beschaffung bringt Vorteile für alle beteiligten Akteure. Zum einen können die Infrastrukturen öffentlicher Häuser modernisiert und vor allem optimiert sowie prozessuale und resssourcenbelastende Aufwendungen reduziert werden. Durch neue Abstimmungs- und Einbindungsverfahren kann die Bedarfsträgerzufriedenheit gesteigert werden. Dafür erforderliches strategisches Vorgehen schafft neue Handlungsfelder und Ressourcen, um innovative Produkte, Dienstleistungen und Systeme am Markt nachzufragen. Hierdurch wird die Innovationskraft der Wirtschaft erheblich unterstützt und es werden neue Innovationsfelder geschaffen. Die Innovationsimpulse durch öffentliche Auftraggeber können eine erhebliche Hebelwirkung auf die Innovationskraft der Wirtschaft entfalten. Würden bei dem derzeitigen öffentlichen Beschaffungsvolumen in Deutschland in Höhe von 350 Milliarden Euro[1] nur ein Prozent in die Nachfrage nach innovativen Produkten und Dienstleistungen fließen, so ergäbe das einen Innovationsimpuls in Höhe von 3,5 Milliarden Euro.

Um diese positiven Effekte für alle beteiligten Akteure zu erzielen, bedarf es eines umfassenden, ganzheitlichen, strategisch ausgerichteten Projektmanagements in der öffentlichen Beschaffung, welches über die traditionellen Vergabeverfahren hinausgeht und die Aufgabenfelder der Beschaffer und die Anforderungen an diese erheblich erweitert. Seit nunmehr fast 10 Jahren bietet die EU Förderprogramme an, die von öffentlichen Stellen genutzt werden können, um innovative Produkte in ihren Häusern anzuschaffen, zu erproben und erfolgreich (weiter-) zu entwickeln. Die öffentlichen Beschaffer werden dadurch zu wichtigen Akteuren in einem umfänglichen Strategie- und Projektentwicklungsprozess. Eigens dafür stehen erhebliche Gelder zur Verfügung (i.d.R. im ein-bis zweistelligen Millionenbereich), die durch drei Instrumente der europäischen Kommission realisiert werden können:

Beschaffungsnetzwerke: Coordination and Support Action – CSA

Netzwerkprojekte, in denen sich Konsortien aus europäischen öffentlichen Beschaffern darüber abstimmen, welche Innovationen für gemeinsame Bedarfe sinnvoll sein könnten. Ergänzt werden diese Projekte durch Marktrecherchen und -Konsultationen, um den Stand der Technik für innovative Produkte oder Lösungen zu erkunden.
Die EU-Förderung beträgt 100% der förderfähigen Kosten.

Vorkommerzielle Auftragsvergabe: Pre-Commercial Procurement – PCP

Sollte die anvisierte Lösung oder das Produkt noch nicht am Markt verfügbar ist, kann sich daran ein Projekt der vorkommerziellen Auftragsvergabe anschließen. In einem PCP-Projekt schreibt das internationale Beschaffer-Konsortium ein dreistufiges Forschungsprojekt aus (Machbarkeitsstudie, Prototypenentwicklung und Prototypentest), durch das Unternehmen F&E-Leistungen bedarfsgerecht und nachfrageorientiert erbringen können.
Die EU-Förderung beträgt 90% der Beschaffungskosten für die nachfrageorientierte Entwicklung innovativer Lösungen.

Auftragsvergabe: Public Procurement of Innovative Solutions – PPI

Daran anschließend oder unabhängig von vorangegangenen Prozessen fördert die Europäische Kommission die Beschaffung von innovativen Produkten bzw. Lösungen (Public Procurement of Innovative Solutions – PPI).
Die EU-Förderung beträgt 35% der Beschaffungskosten für die innovative Lösung, das innovative Produkte.

Die einzelnen Ausschreibungen und die entsprechenden Ausschreibungsunterlagen werden auf dem Teilnehmerportal der Europäischen Kommission[2] veröffentlicht.

[1] 2016, Erhebung der Universität der Bundeswehr in München, Forschungszentrum für Recht und Management öffentlicher Beschaffung (FoRMöB) im Auftrag des Kompetenzzentrums innovative Beschaffung (KOINNO)

[2] http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html

Innovative öffentliche Beschaffung geht über die bekannten, traditionellen Vergabeverfahren hinaus und bietet Schnittmengen mit Aufgaben der strategischen Planung, des ganzheitlichem Projektmanagements und der Mitgestaltung von innovativen Produkten. Um diese zusätzlichen Kompetenzerweiterungen der Beschaffer zu flankieren und zu unterstützen, haben das Bundesministerium für Wirtschaft und Energie (BMWi) mit der EU-Kontaktstelle eine zentrale Beratungsstelle eingerichtet: https://www.koinno-bmwi.de/
Dieses Meta-Arbeitsprogramm sowie weitere Informationen zur innovativen öffentlichen Beschaffung finden Sie auf der Seite https://www.koinno-bmwi.de/eu-foerderung/ .

Das „Meta-Arbeitsprogramm zur innovativen öffentlichen Beschaffung" hat die EU-Kontaktstelle für Öffentliche Beschaffung von Innovationen im DLR Projektträger aus den Arbeitsprogrammen 2018-20 für Horizont 2020, dem EU-Rahmenprogramm für Forschung und Innovation, zusammengestellt.

Es besteht kein Anspruch auf Vollständigkeit. Zu fünf der hier genannten Ausschreibungen liegen noch keine näheren Informationen vor.

DLR Projektträger: Wir bringen Forschung, Innovation und Bildung voran

Der DLR Projektträger hat sich auf Dienstleistungen zur Förderung von Forschung, Innovation und Bildung spezialisiert. Er arbeitet im Auftrag von Bundesministerien, der Europäischen Kommission, Bundesländern sowie Wissenschaftsorganisationen, Stiftungen und Verbände. Er berät zu politischen und einrichtungsbezogenen Strategien und Programmen, begleitet Forschungsfördervorhaben fachlich und administrativ, unterstützt den Wissenstransfer sowie die Verwertung von Forschungsergebnissen. Sein Themenspektrum reicht von Bildung, Gesundheit, Gesellschaft, Innovation, Technologien, Umwelt und Nachhaltigkeit bis hin zu europäischer und internationaler Zusammenarbeit. Als einer der größten Projektträger Deutschlands betreut er derzeit rund 10.000 Vorhaben und mehr als eine Milliarde Euro Forschungsgelder.

Kompetenzzentrum innovative Beschaffung (KOINNO)

Um die strategischen Vorgaben der Bundesregierung in der nationalen und internationalen Innovationspolitik umzusetzen, wurde am 1. März 2013 das Kompetenzzentrum innovative Beschaffung (KOINNO) eingerichtet. Ziel des Kompetenzzentrums innovative Beschaffung ist es, die öffentlichen Auftraggeber beim Aufbau bzw. bei der Umstrukturierung ihres Einkaufsbereichs hin zu einer effizienten, innovativen und strategischen Beschaffungsstelle zu unterstützen. Die Innovationsorientierung der öffentlichen Beschaffung in Deutschland soll dauerhaft gestärkt und der Anteil der Innovationen am Gesamtvolumen des öffentlichen Einkaufs in Deutschland erhöht werden. Ein Schwerpunkt der KOINNO-Aktivitäten besteht deshalb in der individuellen und kostenfreien Beratung der Beschaffungsverantwortlichen auf Bundes-, Landes- und Kommunalebene.

Bei folgenden Beratungsfeldern unterstützt das KOINNO-Team:
- Effiziente und ergebnisorientierte Prozesse, frühzeitige Einbindung der Beschaffung
- Bestandsanalyse der Einkaufsorganisation und Ableitung von Handlungsempfehlungen
- Begleitung und Umsetzung von konkreten Beschaffungsvorhaben
- Gestaltung neuer Vergabeprozesse
- Einsatz von innovationsfördernden Vergabeinstrumenten wie Innovationspartnerschaften, Vorkommerzielle Auftragsvergabe, Verhandlungsverfahren
- Einwerbung von europäischen Fördermitteln durch die „EU-Kontaktstelle für öffentliche Beschaffung von Innovationen" in KOINNO
- Rechtliche und wirtschaftliche Fragestellungen rund um die innovative Beschaffung

Das KOINNO-Leistungsportfolio umfasst:
- Fachveranstaltungen wie Innovationsschauplätze, Regionalkonferenzen und strategische Dialoge zur Wissenserweiterung und Netzwerkbildung
- Weiterbildungsangebote wie Seminare, Webinare, E-Learning und Inhouse-Schulungen
- Werkzeuge und Arbeitshilfen, Sammlung guter Praxisbeispiele, Publikationen

- Nutzung sozialer Medien und diverserer Kommunikationskanäle, um Beschaffer und strategische Entscheider zu sensibilisieren und zu motivieren.

Bundesverband Materialwirtschaft, Einkauf und Logistik e.V. (BME) – www.bme.de
Das Bundesministerium für Wirtschaft und Energie hat den BME im Jahr 2013 mit dem Aufbau und der Leitung des Kompetenzzentrums innovative Beschaffung beauftragt.

Der 1954 gegründete Bundesverband Materialwirtschaft, Einkauf und Logistik e.V. (BME) ist der führende Fachverband für Einkäufer, Supply Chain Manager und Logistiker in Deutschland und Kontinentaleuropa. Die Mitglieder des Fachverbandes gehören allen Branchen und Sektoren an wie der Industrie, dem Handel, den öffentlichen Einrichtungen oder dem Finanzbereich. Zu den Zielen gehören der Transfer von Know-how durch einen ständigen Erfahrungsaustausch, die Aus- und Weiterbildung von qualifiziertem Personal und die wissenschaftliche Arbeit an neuen Methoden, Verfahren und Techniken. Außerdem unterstützt der BME seine Mitglieder bei der Erschließung neuer Märkte und gestaltet wirtschaftliche Prozesse und globale Entwicklungen mit.

Die 9.600 BME-Mitglieder (Stand 2018) repräsentieren ein Einkaufsvolumen von jährlich rund 1,25 Billionen Euro. Das entspricht ungefähr der Hälfte des deutschen Bruttoinlandsprodukts. 38 Regionen schaffen ein Netzwerk und veranstalten jährlich etwa 400 Treffen mit Fachvorträgen, Diskussionen oder Firmenbesuchen. Mehr als 30 Fachgruppen erarbeiten zukunfts- und praxisorientierte Konzepte, die der BME seinen Mitgliedern und der Fachöffentlichkeit zur Verfügung stellt. Vier Sektionen bündeln die Aktivitäten in verschiedenen Tätigkeitsgebieten. Neben den Beschaffungskategorien zählen die Bereiche Öffentliche Beschaffung, Logistik und Dienstleister dazu. Seit der Gründung konnte der BME in seinen Aus- und Weiterbildungsangeboten rund 200.000 Teilnehmer begrüßen. Rund 900 Veranstaltungen werden jedes Jahr im In- und Ausland vom Verband und seinen Tochtergesellschaften ausgerichtet.

Tabellarische Ausschreibungsübersicht (Calls für PPI,PCP und CSA)

Forschungsinfrastrukturen (Säule I)

Call	Titel	Type	Budget / Deadlines
INFRAEDI-04	Innovative HPC systems	PPI	Tbc

Grundlegende und industrielle Technologien (Säule II)

Call	Titel	Type	Budget / Deadlines
ICT-34	ICT based solutions for any area of public interest	PCP	€ 6 M /17.04.2018
ICT-34	ICT based solutions for any area of public interest	PCP	€ 6 M/28.03.2019

Gesundheit, demographischer Wandel und Wohlergehen (Säule III)

Call	Titel	Type	Budget / Deadlines
DTH-10	Digital health & care	PCP	€ 22 M/04.11.2018
BHC-10	Next generation sequencing for routine diagnosis	PCP	€ 40 M/16.04.2019
BHC-20	Infection & integrated care	PCP	Tbc
DTH-05	Digital health & care solutions for an ageing society	PPI	€ 10 M/24.04.2019
HCO-12	Integrated healthcare / diagnosis	CSA	€ 3 M/18.04.2018
HCC-04	Digital health & care	CSA	€ 3 M/24.04.2018

Forschungsinfrastrukturen (Säule I)

Call	Titel	Type	Budget / Deadlines
LC-CLA-13-2020	Climate change resilience	PCP	Tbc

Sichere, saubere und effiziente Energie (Säule III)

Call	Titel	Type	Budget / Deadlines
LC-SC3-RES-10-2020	100% renewable energy	PCP	Tbc
LC-SC3-JA-3-2019	Wave energy	PCP	€ 20 M/27.08.2019

Sichere Gesellschaften (Säule III)

Call	Titel	Type	Budget / Deadlines
SU-GM03	Security	PCP	€ 8,2 M/23.08.2018
SU-GM03	Security	PCP	€ 7 M/22.08.2019
SU-GM03	Security	PCP	Tbc

Struktur von HORIZON 2020

Die Zuordnung der Ausschreibungen zu den einzelnen Säulen ist aus der vorstehenden Tabelle ersichtlich.

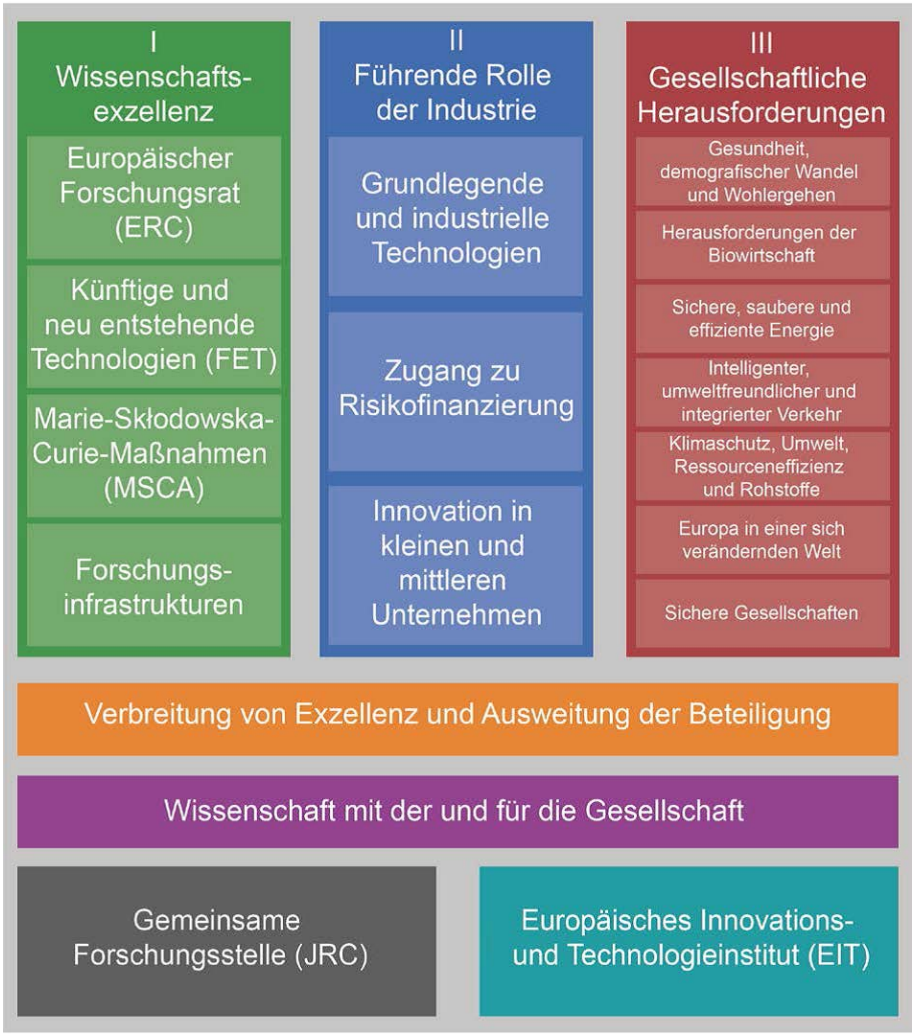

Abb.1: Programmstruktur Horizont 2020

Ausschreibungen

Forschungsinfrastrukturen

INFRAEDI-04 – Innovative HPC systems (PPI)
Säule I: Wissenschaftsexzellenz (entsprechend der Anordnung in Abb.1)
Der Call ist für das Jahr 2020 geplant und wird vermutlich Ende 2019 veröffentlicht.

Bisher bekannt:

Indicative budget: EUR 80 million

Topics: Demonstrating the role of Research Infrastructures in the translation of Open Science into Open Innovation (continued in 2020).

ICT-34 - ICT based solutions for any area of public interest (PCP)

Säule II: Führende Rolle in der Industrie (entsprechend der Anordnung in Abb.1

Topic identifier: ICT-34-2018-2019
Publication date: 27 October 2017
Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 31 October 2017
Deadline: 17 April 2018 17:00:00

Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 16 October 2018
Deadline: 28 March 2019 17:00:00

Budget: 6 Mio. €

Specific Challenge:
The challenge is to enable public procurers to collectively implement PCPs in order to close the gap between supply and demand for innovative ICTs. The objective is to bring radical improvements to the quality and efficiency of public services by encouraging the development and validation of breakthrough solutions through Pre-Commercial Procurement.

Scope:
PCP actions targeting consortia of procurers with similar procurement needs that want to procure together the development of innovative ICT based solutions to modernize public services whilst creating growth opportunities for industry and researchers in Europe in new markets. This topic is open to proposals for PCP actions in all areas of public sector interest requiring innovative ICT based solutions. It is open both to proposals requiring improvements mainly based on one specific ICT technology field, as well as to proposals requiring end-to-end solutions that need combinations of different ICT technologies.

Proposals shall demonstrate sustainability of the action beyond the life of the project. Activities covered shall include cooperation with policy makers to reinforce the national policy frameworks and mobilise substantial additional national budgets for PCP and PPI, as well as awareness raising, technical assistance and/or capacity building to other procurers beyond the project to mainstream PCP/PPI implementation and to remove obstacles for introducing the innovative solutions to be procured into the market.

The Commission considers that proposals requesting a contribution from the EU of up to EUR 6 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.
Specific requirements for PCP actions are described in part E of the General Annexes of the Work Programme.

Expected Impact:
- Reduced fragmentation of demand for innovative solutions;
- Increased opportunities for wide market uptake and economies of scale for the supply side through the use of joint specifications, wide publication of results and where relevant contribution to standardisation, regulation or certification.

Gesundheit, demografischer Wandel und Wohlergehen

DTH-10 – Digital health & care (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SC1-DTH-10-2019-2020
Publication date: 27 October 2017
Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 26 July 2018
Deadline: 14 November 2018 17:00:00

Budget: 22 Mio. €

Specific Challenge:
Digital solutions supporting a continuum of care across a range of health and care services can relieve the pressure on governments to provide more cost-effective health and care systems by improving utilisation of healthcare and health outcomes. In this context the challenges are to network, lead and facilitate health systems research, innovation and digitalisation in view of addressing key areas of interventions in health and care services including health promotion and disease prevention.

Scope:
Support the health and care service provider to procure the development, testing and implementation of digital services and communication concepts that can facilitate the transition to integrated care models across health and social services and country-specific cross-institutional set-ups, including decentralised procurement environments and collaboration across institutions. Key challenges that could be addressed are patient empowerment, self-management, patient safety, patient involvement, chronic disease management, diagnosing, home-care logistics, hospital logistics, skills and independent living. These challenges could be addressed by applicable ICT domains e.g., telemedicine, mHealth, IoT, shared open source IT-based platforms, etc. as will be defined in the market consultation process. This should result in early adoption and demonstration of the potential for scaling-up the services and positive impact with evidence of appropriate incentives of various actors.

- Proposals should deliver and:
- be driven by clearly identified user needs guiding the procurers of the buyers group;
- be driven by public and/or private procurers from each country participating (at national, regional or local level) that have responsibilities and budget control in the relevant area of supply of health and care services;
- demonstrate strong commitment of end-users and their communities in the co-creation process;
- as applicable contribute to the use of interoperable solutions based on open platforms and take into account existing best practices and standardisation initiatives;
- provide robust safeguards to ensure compliance with ethical standards and privacy protection;
- include robust time-lines, a well-structured work-plan aligned to the objectives of the different phases and according particular importance to the role played by the preparatory phase; (templates made available by the Commission are strongly recommended to be used in particular as concerns the call for tender) and;
- identify and understand the implications for training (including aspects of organisational, digital health literacy and new collaborative innovation principles and practises), management, and retention of healthcare staff under this topic.

The procurers, hospital clusters, care services providers and other parts of the regional ecosystems should be enabled to share knowledge, test results and needs to better coordinate the primary and community care towards more local responsibility for care services, monitoring and rehabilitation. This may include aspects such as organisational processes, digital health literacy, workforce training, financing and business models, hospital and telemedicine services, home care, patient centeredness, development of shared open

source IT-based platforms, data integration, standards and regulatory issues, management and retention of healthcare staff.

The service innovation should facilitate the early adoption and transferability (to other local contexts) of successful solutions addressing the innovation gap. Multi-policy/strategy collaboration across institutions (hospitals and institutions under the responsibility of municipalities), industries, academia and user communities capable of establishing dedicated operational programmes are necessary to safeguard both the service and business performance metrics and the growth potential in the innovation chain.

The proposal should include the methodology foreseen to measure progress towards the key performance areas of quality of care, sustainability and economic value within the selected key area of intervention, see e.g. MAFEIP. Sufficient travel allowances for regular information days concerning the procedures and thematic networking events (e.g. related to relevant co-ordination support actions) should be safeguarded. A plan how to implement the services would be an asset if the outcome of the project is successful. Approaches towards value based procurement are encouraged.

The Commission considers that proposals requesting a contribution from the EU of around €5-6M would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Proposals of this topic should follow the specific requirements for pre-commercial procurement (PCP) supported by Horizon 2020 grants as set out in General Annex E of the WP.

Expected Impact:
The proposal should provide appropriate indicators to measure its progress and specific impact in the following areas:

- Established path to innovation, evidence of benefits of disruptive technologies that can support the development of sustainable business models, improved user and market engagement, strengthened procurement community, evidence of healthy innovation ecosystem including researchers, users, eHealth and other solution providers and procurers. Evidence in key performance areas i.e., quality in health and care, sustainability of the delivery system and economic value.
- Increased opportunities for solution uptake across wider international procurement markets by aiming at interoperable solutions that are validated through field testing by participating procurers in multiple countries across Europe and contribution to standardisation where relevant.

BHC-10 – Next generation sequencing for routine diagnosis (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SC1-BHC-10-2019
Publication date: 27 October 2017
Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 26 July 2018
Deadline: 16 April 2019 17:00:00

Budget: 40 Mio. €

Specific Challenge:
We observe a progressive shift in routine diagnostics, and more particularly in personalised medicine practice, from a growing number of molecular tests to a next generation sequencing approach (NGS). NGS can provide insights on a person's genetic susceptibility to disease, diagnostic information, and predictive indications about treatment outcome. It also allows to embrace simultaneously different molecular pathways of disease evolution and to identify actionable mutations in a patient for medical decision and further research. In addition, it requires less sample material than multiple tests and therefore reduces risk and inconvenience for patients. However, the introduction of NGS in clinical practice is hampered by its cost, the availability of proper NGS tests, and diagnostic errors resulting from insufficient quality assurance, technological bias and complex interpretation of data.

Scope:
The objective is to implement NGS in routine diagnostics for personalised medicine and scale up demand-driven innovation for healthcare systems. This includes organisational, economical, technical and clinical aspects. It should lead to NGS tests, clinically validated procedures (including sex analysis), quality assurance schemes, tools and methods for data collection, management, analysis and interpretation, with a view to assist clinical decision-making and foster medical research and innovation. Transferability and cloud based NGS data analyses should be considered, as appropriate. Input from initiatives like the EJP Cofund on rare diseases and ERNs should be considered when relevant. Ethical issues should be addressed.

For grants awarded under this topic for Pre-Commercial procurement it is expected that results could contribute to European or international standards. Therefore, the respective option of Article 28.2 of the Model Grant Agreement will be applied.

The Commission considers that proposals requesting a contribution from the EU of between EUR 9 and 11 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Proposals of this topic should follow the specific requirements for pre-commercial procurement PCP supported by Horizon 2020 grants as set out in General Annex E of the WP.

Expected Impact:
- New NGS platforms and use of NGS tests in routine diagnostics for personalised medicine.
- Accepted new European standards and quality assurance schemes with respect to NGS.
- Strengthening of implementation of personalised medicine and improved clinical decisions and health outcomes for the benefits of patients.
- Contribution to the sustainability of healthcare systems.
- Growth and benefit to the European industry, in particular SMEs.

BHC-20 – Infection & integrated care (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Zum Zeitpunkt der Veröffentlichung dieses Arbeitsprogrammes lagen keine weiteren Informationen vor.

DTH-05 – Digital health & care solutions for an ageing society (PPI)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SC1-DTH-05-2019
Publication date: 27 October 2017
Types of action: PPI Public Procurement of Innovative solutions
DeadlineModel: single-stage
Opening date: 16 October 2018
Deadline: 24 April 2019 17:00:00

Budget: 10 Mio. €

An ageing population is increasing demand-side pressures on public health and social care providers across Europe. These pressures undermine the long-term sustainability of existing models for delivering care services to the ageing population.

The challenge is to scale up outcome-based innovative digital health and care solutions across EU borders through joining up actions in procurement of innovation. Digital health and social care solutions have been tested and have demonstrated success in smaller scale settings. However, despite cooperation initiatives amongst regions through INTERREG programmes or the transfer of innovation schemes of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA), large-scale deployment of digital health and care solutions across EU borders remains limited. There is a lack of collaborative efforts in public purchasing of innovative ICT-based solutions for active and healthy ageing and successfully engaging demand and supply sides in scaling up innovation. This is the case in particular for digital solutions integrating health, social or community care and informal care, IoT enabled independent living solutions that allow the citizens to live safely and independently at home therefore avoiding institutionalisation, or tele-care solutions and tools supporting for self-care and person-centred care. Moreover, take-up of these ICT-based solutions by both public care providers as well as people in need for care is a crucial factor in successfully alleviating the demand-side pressures on public health and care provision. Supporting the public procurement of innovation helps public authorities by aggregating demand and sharing the inherent risks associated to deploying new innovative solutions that can be integrated with existing public health and care provision systems.

Scope:
This topic will contribute to the Digital Single Market Strategy priorities on digital transformation of health and care (notably to the priority on user-centred integrated care), to the Scaling-Up Strategy[4] of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) and will support the EIP on AHA Reference Sites contribution to the Digital Single Market Strategy, notably the priority focusing on user-centred integrated care. The actions supported will target large-scale deployment of digital health and care solutions across different regions in Europe. In line with the priority actions of the EIP on AHA Scaling-up Strategy, the scope of this PPI is to specify, purchase and deploy ICT based solutions (made up of services and ICT products to enable the provision of services) for active and healthy ageing through a common supply and demand side dialogue, which can deliver sustainable, new or improved health and care services promoting patient feedback in which public procurement approaches for innovative solutions lead to improved outcomes. Proposals should:

- Be driven by clearly identified procurement needs[5] of the participating organisations and building on a deep understanding of the needs of the ageing population, as well as the needs of the relevant health and care providers;
- Support sustainable deployment of new or improved person-centred and outcome-based services promoting patient feedback by providers involved in the procurement of solutions for digital health and care providers, including networking of inpatient and outpatient care, nursing services and care homes;
- Contribute to the creation of scalable markets across Europe in innovative solutions for active and healthy ageing;

- Specify measures that will ensure the sustainability of solutions beyond the lifespan of the proposed project, notably taking into account levels of acceptance with users and professionals as well as health economics considerations.
- Engage public and/or private procurers from each country participating (at national, regional or local level) that have responsibilities and budget control in the relevant area of care or supply of services;
- Be based on a complete set of common specifications for end to end services;
- Demonstrate that the implementation phase will reach "large scale" (i.e. sufficient scale to achieve statistical significance) through region-wide deployment across multiple regions of Europe;
- Contribute to the use of interoperable solutions based on open platforms and take into account existing best practices and standardisation initiatives;
- Provide robust safeguards to ensure compliance with ethical standards and privacy protections and take account of the gender dimension;
- Contribute with good outcome-based practices that are impact measured according to the MAFEIP methodology and can be made available for replication across other regions (e.g. "detailed plans" for larger scale sustainable uptake of innovative solutions for active and healthy ageing, reference material and guidelines, manuals and education materials) through the EIP on AHA innovative practices repository.

Contribute to the development of national strategies to stimulate the procurement of digital innovation for health and care services based on the outcomes achieved at national level.

The European Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 5 million would allow this specific challenge to be addressed appropriately through PPI. This does not preclude submission and selection of proposals requesting other amounts.

Proposals of this topic should follow the specific requirements for innovation procurement PPI supported by Horizon 2020 grants as set out in General Annex E of the WP.

Expected Impact:
The proposal should provide appropriate indicators to measure its progress and specific impact in the following areas:

- Growing awareness and successful use of public procurement to boost ICT innovation applied to integrated care and active and healthy ageing, implemented across the whole chain of care ultimately benefiting the growing ageing population across Europe;
- Contribution with data and experiences to regulatory and legislative process development addressing potential barriers to procurement of innovative solutions for active and healthy ageing;
- Contribution of an open and comprehensive socio-economic evidence base for ICT investments in the field that can support the development of sustainable business models (e.g. cost-benefit analysis, increased efficiency of health and care systems, impact assessments, return on investments, quality of life improvements for users, ethics, safety gain and user satisfaction);
- Support initiatives on interoperability and standardisation that can contribute to defragmentation of the market for ICT based active and healthy ageing solutions;
- Creation of economic boundary conditions that can support long-term sustainability of health and care systems and emergence of new business models to develop ICT innovation for active and healthy ageing in Europe;
- Support forward-looking, concerted public-sector investment strategies that benefit from joint approaches across different regions;
- Create new opportunities for market uptake and economies of scale for the supply side for ICT based solutions and services for active and healthy ageing in a Digital Single Market for Europe.
- Contribute to inform policy measures that foster the take-up of ICT solutions for active and healthy ageing.

HCO-12 – Integrated healthcare / diagnosis (CSA)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SC1-HCO-12-2018
Publication date: 27 October 2017
Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017
Deadline: 18 April 2018 17:00:00

Budget: 3 Mio. €

Specific Challenge:
Innovative solutions for healthcare have the potential to improve patient care in European healthcare setting. Integrated care[1] principles allow care for patients to be better coordinated, and jointly planned by the health and social care professionals across vertically and horizontally relevant preventive and curative services. To respond to changing organisation of care and support the transition of hospital services towards *a patient-centred integrated care* model, healthcare providers are encouraged to join forces and create demand for such innovations through public joint procurement, serving the triple aim of healthcare: better care experience, better care outcomes, and more efficient care.

Implementation of timely and correct *diagnostics for infectious diseases* that will speed up the identification of the causative infectious disease pathogens, resistance and drug susceptibility is crucial for tailoring the antimicrobial treatment to ensure appropriate antimicrobial drug use and to reduce unnecessary prescriptions. As innovative rapid diagnostics are significantly more expensive than culture-based diagnostics that are widely used since decades, the uptake of these new tests in hospitals and especially primary care centres has been limited. To respond to this clinical and public health need and to facilitate the uptake of innovative rapid diagnostics for infectious diseases into healthcare practice, contracting authorities can act together to create demand for such innovations through public joint procurement.

However, before joint innovation procurement can be undertaken, first the cross-border cooperation between interested healthcare procurers must be established to counter fragmentation of delivering innovative solutions in healthcare settings.

Scope:
The objective of this coordination and support action (CSA) is to create a Europe-wide consortium of healthcare providers and public procurers in the health and social care sector that define together unmet procurement needs to implement innovative solutions in healthcare.

The consortium should prepare future procurement topics to conduct:

- A PCP/PPI to implement rapid diagnostic tools for infectious diseases in clinical practise (at least 1 topic). To assure the compatibility and interoperability between infectious disease diagnostics and avoid technological standardisation issues, public health sector procurers that participate in this CSA should also develop specifications that are suitable for Europe-wide deployment of the innovative diagnostics.
- One or more PCP/PPIs to drive the shift towards health systems reform. Clinicians, patients, public procurers in healthcare systems, health and social care facility managers, and health insurers/payers should work jointly to identify the gaps and needs that will lead to the development of new innovative solutions for patient-centred integrated healthcare.

Activities supported by this CSA should include the following aspects:

- preparation of innovation procurement calls to be published in topic SC1-BHC-20-2020 of the Work Programme 2018-2020. That topic will follow the specific requirements for innovation procurement PCP/PPI supported by Horizon 2020 grants as set out in General Annex E of the work programme.
- open market consultation with the industry, including on technical and service readiness
- analysis of the suitable testing environments

- analysis of differences in legal public procurement framework for the participating procurers in health and social care,
- market analysis and analysis of potential barriers (standardisation, certification, regulatory requirements, intellectual property rights, contracting models, payment schemes)
- consultations with relevant stakeholders, end-users (consumer organisations, reimbursement bodies) to prepare for a future market uptake of the solutions.

Expected Impact:

- Improved networking of health and social care providers and public procurers in healthcare systems to identify stakeholders and specifications for a strategy to launch procurement for innovative diagnostics for infectious diseases, and for innovative solutions in integrated care.
- Optimised procurement strategy for innovative infectious disease diagnostics and for innovative solutions in integrated care.

The Commission considers that a proposal requesting an EU contribution between EUR 1.5 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

HCC-04 – Digital health & care (CSA)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SC1-HCC-04-2018
Publication date: 27 October 2017
Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017
Deadline: 24 April 2018 17:00:00

Budget: 3 Mio. €

Specific Challenge:
Health and care service providers and users are increasingly facing complex decisions when exploring and investing in new health and care solutions. There is a need to support cross-border cooperation in preparation of procurement of research and innovative digital solutions, including on how to balance innovation risks with improved outcomes. Further support is also needed for implementing high quality policies, strategies and practises in a concerted manner and providing more confidence in addressing key areas of interventions and related unmet needs, procedures and other measures. In addition there is a need to facilitate an appropriate dialogue with the supply side and academic stakeholders to understand the constraints and possibilities.

Scope:
Create favourable framework conditions for cross-border Communities of Practise (CoP) and create a network that will assist the health & care research and innovation ecosystems in taking investment decisions on future procurement of research and innovation and, eventually, on (large scale) deployment of eHealth systems and new care delivery models. The network should support existing ecosystems, create capacities, promote, co-ordinate, collaborate with other innovation accelerators and investors, and focus on adoption and scale of health innovation European wide. To facilitate sufficient knowledge brokerage all appropriate actors in the innovation chain and systems should be engaged

The consortium should represent a well-designed network of procurers and demand side actors e.g., European regions, national care authorities, NGOs, patient and consumer organisations that have proven experience in the field and the capacity to engage and consult objectively all relevant actors. The consortium should also connect to investors, National Promotional Banks and Economic Development Agencies.

Additionally, diverging expectations and risk management in innovation chain should be addressed by offering a set of support activities beyond the innovation procurement procedures including access to finance and investor networks.

Approaches addressing consumer health should be interlinked in those cases where the institutional health and care services are expected to contribute.

The consortium is expected to assist those procurers that intend to prepare for a cross-border innovation procurement e.g., guiding them to address well-defined unmet needs of users in health and care, use the repositories of best practises and implementation guidelines and providing opportunities for networking.

The findings in earlier co-ordination and support actions for procurers e.g., EPP eHealth, Inspire and EAFIP should be taken on-board. Networking with supply and consumer market actors, investors and business accelerators should be well established (e.g. eHealth hub[5] , EIT-KIC, EIP-AHA, AAL, ENoLL, National Promotional Banks, Economic Development Agencies). The progress in Blueprint Digital Transformation of health and care and EU-US MoU on health IT innovation eco-systems should be incorporated.

The proposal should include parallel activities building up on the competences and capacities of the network including but not limited to:

1) Co-ordinate the development of a multi-collaborative growth policy & strategy of the European health & care procurers and other demand side actors in the quadruple helix systemic context. The knowledge brokerage should facilitate easy migration of competences benefitting the ecosystems at various maturity levels in the innovation chain in thematic Communities of Practise and other professional networks.

In particular, the following elements should be taken into account:

- facilitating the development of key areas of interventions in knowledge brokerage settings to get validated and accepted in health & care delivery services integrating data strategy as a fuel of novel digital health services;
- linking research institutions, university hospitals in the context of thematic CoP;
- education of new collaborative innovation principles and practises;
- building upon national initiatives, however, taking into account the Lisbon treaty and developing the existing or building up repositories of methodologies and set-ups of CoPs

2) Tailored assistance for procurers, regions, cities, national authorities and users to foster sustainable adoption e.g., by developing case specific innovation/business models, giving legal aid, addressing regulation, managing risks, sharing best practises, training and education, access to finance, addressing procurement events etc., interlinking with innovation acceleration of digital health and care industries, other actors.

3) The network should undertake activities that investigate the feasibility and facilitate the concrete preparation of a cross-border PCP for at least one shared common user and procurement need.

The Commission considers that proposals requesting a contribution from the EU of up to €3M over three years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting other amounts or duration.

Expected Impact:

The proposal should provide appropriate indicators to measure its progress and specific impact in the following areas:

- Concerted approach and solutions to the challenges faced by the health ecosystems as perceived by service providers and users in several countries. Increased opportunities for health and care services providers to address unmet needs. Reduced fragmentation of service providers' demands.
- Evidences of support and collaboration with consortia developing unmet needs for innovation procurement and implementation aspects beyond the innovation procurement procedures.
- Concrete preparation of a cross-border PCP for at least one shared common procurement need.

Klimaschutz, Umwelt, Ressourceneffizienz und Rohstoffe

LC-CLA-13-2020 – Climate change resilience (PCP)
Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Zum Zeitpunkt der Veröffentlichung dieses Arbeitsprogrammes lagen keine weiteren Informationen vor.

Sichere, saubere und effiziente Energie

LC-SC3-RES-10-2020 – 100% renewable energy (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Zum Zeitpunkt der Veröffentlichung dieses Arbeitsprogrammes lagen keine weiteren Informationen vor.

LC-SC3-JA-3-2019 – Wave energy (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: LC-SC3-JA-3-2019
Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)
Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 14 November 2017
Deadline: 27 August 2019 17:00:00

Budget: 20 Mio. €

Specific Challenge:
The challenge is the design, development and validation of cost-effective Wave energy convertors that can survive in a harsh and unpredictable ocean environment as the ocean through demand-driven Pre-Commercial Procurement. The challenge is open to proposals seeking to steer wave energy research and development in an effective way at a European level establishing convergence of wave energy technologies and to bring these technologies to the market.

Scope:
In the past years, Member States and the European Commission have been working closely together to use their public resources via previous Ocean ERA-NET Cofund actions but like to reinforce their cooperation to address the challenge through a different funding instrument. In this European PCP action it is the aim to elevate experience with national public procurement approaches at a European level to bring European Wave Energy Research and Development more efficiently into the direction of commercialization.

The proposed action is to be structured along the following phases:

Preparation phase: The participating users/buyers of R&D service should agree on common performance levels and associated specifications for the wave energy systems. The action should introduce the ocean energy phase gate procedure on a European level.

They will plan the research and the design of actions covering a broad variety of issues. The PCP will consist of several building blocks addressing different sub-challenges. The funding of the participating programme owners (national and/or regional) and the European Union will be used for different stages in the wave energy technology development. The results of phase 1 should lead to calls for tenders (for the procurement of R&D services) which focus on clearly identified technologies which contribute to the development of commercial wave energy devices. The procurement should be also open for developers, researcher organisations which are not located in the participating countries/regions.

The expected outcomes at this stage: 1) completed tender documents, 2) signed joint procurement agreement confirming the collaboration modus including the financial commitment of the buyers group and 3) final confirmation of the lead procurer.

Execution stage: The action will take care for the implementation of the Pre-Commercial Procurement and of the PCP contracts. The results will be shared within the European industry to accelerate technology development and the establishment of guidelines and standards to facilitate the transferability of the knowledge creation. The research and specification work should lead to at least 3 prototypes tested in an environment close to expected performance. At the end of the action at least one of the prototypes should be ready for testing in an operational environment at commercial scale.

Proposals have to describe the jointly identified challenge, indicating how it fits into their mid-to-long term innovation plans, why solutions currently available on the market or under development are not meeting their needs. Activities have to include: (1) networking related to preparation, management and coordination and (2) joint research activities related to the validation of PCP strategy.

The consortium should have at least three legal entities established in different member states or H2020 associated countries. In the consortium the participation of minimum two 'public procurers' is required. Other entities might be considered which can have a clear added value in the preparation and/or execution of the PCP or in coordination and networking activities. Please see part E of the General Annexes for the specific proposal requirements for PCP actions.

The Commission considers that PCP proposals requesting a contribution from the EU of between 15 and 20 million would allow this area to be addressed appropriately. Nonetheless, this does not preclude submission a selection of proposals requesting other amounts.

Expected Impact:

- Convergence of wave energy technologies, acceleration of technology development, proof-of-concept and validation of wave energy technology for the benefit of the wave energy sector and as such improved knowledge transfer.
- Pool resources at national and EU levels dedicated to Research and Development and provide effectively a significant developmental boost of wave energy technology.
- More effective use of public resources for Research and Demonstration.

SU-GM03 – Security (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SU-GM03-2018-2019-2020
Publication date: 27 October 2017
Focus area: Boosting the effectiveness of the Security Union (SU)
Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 15 March 2018
Deadline: 23 August 2018 17:00:00

Budget: 8,2 Mio. €

Specific Challenge:
Innovative solutions are needed when resources from different countries are required to work more closely together. Such solutions should support the development of the EU's Security Union.

Scope:
Practitioners from several countries are invited to proceed with the procurement of innovative solutions to enhance their operational capability. Practitioner organisations may be private or public entities.

Phase 0: To draft common requirements for innovative prototypes, agreed among the practitioner organisations involved in the action, and to prepare the technical tender documents ready for use in the subsequent phase of the action;

Phase 1: To prepare a full tenders package for calls for tenders to build security-relevant prototypes based on the technical input resulting from Phase 0; to prepare for the validation of the future prototypes;

Phase 2: To implement the calls for tenders to generate 2 prototypes from 2 different sources;

Phase 3: To benchmark and validate the 2 prototypes against the method developed during Phase 1;

Phase 4: To draft a curriculum for pan European training in using the prototypes.

The centre of gravity for technology development with actions funded under this topic is expected to be up to TRL 8 – see General Annex G of the Horizon 2020 Work Programme.

Solutions are to be developed in compliance with European societal values, fundamental rights and applicable legislation, including in the area of free movement of persons, privacy and protection of personal data. Societal aspects (e.g. perception of security, possible side effects of technological solutions, societal resilience) have to be addressed in a comprehensive and thorough manner. All participating procurement authorities should also commit to comply with EU data protection legislation in the development of innovative, advanced systems to support security and in particular the principles of data protection by design and by default.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 to 12 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:
Short term:

- Pre-commercial prototypes matching requirements common to many Member States, and available from 2 different sources for further industrialisation.
- High leveraging effect of the EU contribution to the action.

SU-GM03 – Security (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Topic identifier: SU-GM03-2018-2019-2020
Publication date: 27 October 2017
Focus area: Boosting the effectiveness of the Security Union (SU)
Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 14 March 2018
Deadline: 22 August 2018 17:00:00

Budget: 7 Mio. €

Specific Challenge:

Innovative solutions are needed when resources from different countries are required to work more closely together. Such solutions should support the development of the EU's Security Union.

Scope:

Practitioners from several countries are invited to proceed with the procurement of innovative solutions to enhance their operational capability. Practitioner organisations may be private or public entities.

Phase 0: To draft common requirements for innovative prototypes, agreed among the practitioner organisations involved in the action, and to prepare the technical tender documents ready for use in the subsequent phase of the action;

Phase 1: To prepare a full tenders package for calls for tenders to build security-relevant prototypes based on the technical input resulting from Phase 0; to prepare for the validation of the future prototypes;

Phase 2: To implement the calls for tenders to generate 2 prototypes from 2 different sources;

Phase 3: To benchmark and validate the 2 prototypes against the method developed during Phase 1;

Phase 4: To draft a curriculum for pan European training in using the prototypes.

The centre of gravity for technology development with actions funded under this topic is expected to be up to TRL 8 – see General Annex G of the Horizon 2020 Work Programme.

Solutions are to be developed in compliance with European societal values, fundamental rights and applicable legislation, including in the area of free movement of persons, privacy and protection of personal data. Societal aspects (e.g. perception of security, possible side effects of technological solutions, societal resilience) have to be addressed in a comprehensive and thorough manner. All participating procurement authorities should also commit to comply with EU data protection legislation in the development of innovative, advanced systems to support security and in particular the principles of data protection by design and by default.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 to 12 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:

Short term:

- Pre-commercial prototypes matching requirements common to many Member States, and available from 2 different sources for further industrialisation.
- High leveraging effect of the EU contribution to the action.

SU-GM03 – Security (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Zum Zeitpunkt der Veröffentlichung dieses Arbeitsprogrammes lagen keine weiteren Informationen vor.

Maßnahmenbeschreibung

Annex E:
http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-e-inproc_en.pdf