Horizon 2020

Dedicated SME Instrument Work Programme 2014-2015

Table of Contents

1. Common Conditions
1.1. Scope
1.2. Expected impact
1.3. Cut-off dates
1.4. Eligibility and admissibility conditions
1.5. Proposal page limits and layout
1.6. Evaluation criteria, scoring and threshold
1.7. Evaluation procedure
1.8. Indicative timetable for evaluation and grant agreement:
1.9. Consortium agreements
2. Budget
Overall budget for 2014 and 20159
Phase 1 Budget for 2014 and 2015 10
Phase 2 Budget for 2014 and 2015 11
3. Topics
ICT 37 – 2014/15: Open Disruptive Innovation Scheme 12
Specific Challenge:
Budget12
NMP 25 – 2014/2015: Accelerating the uptake of nanotechnologies, advanced materials or advanced manufacturing and processing technologies by SMEs
Specific challenge
Budget
BIOTEC 5 – 2014/2015: SME-boosting biotechnology-based industrial processes driving
competitiveness and sustainability14
Specific challenge
Budget14

SME-SPACE-1-2014/2015	15
Specific challenge	15
Budget	15
SFS-8-2014/2015: Resource-efficient eco-innovative food production and processing	16
Specific Challenge:	16
Budget	16
BG-12-2014/2015: Supporting SMEs efforts for the development - deployment and market	
replication of innovative solutions for blue growth	17
Specific Challenge:	17
Budget	17
SIE 1 – 2014/2015: Stimulating the innovation potential of SMEs for a low carbon and efficient ensystem	
Specific Challenge:	
Budget	
IT.1-2014-2015: Small business innovation research for Transport	19
Specific challenge:	
Budget	
SC5-20-2014/2015: Boosting the potential of small businesses for eco-innovation and a sustainab	
supply of raw materials	
Specific challenge:	20
Budget	20
INSO-9-2015: Innovative mobile e-government applications by SMEs	21
Specific challenge:	21
Budget	21
INSO-10-2015: SME business model innovation	22
Specific challenge:	22
Budget	22
DRS-17- 2014/2015: Protection of Urban soft targets and urban critical infrastructures	23
Specific Challenge:	23
Budget	24
4. Specific Topic	25
PHC 12 – 2014/2015: Clinical validation of biomarkers and/or diagnostic medical devices	25
Specific challenge:	25
Scope:	
Expected impact: This should provide:	26

Type of action	
Budget	
5. Specific Provisions and funding rates	

<u>1. Common Conditions</u>

<u>1.1. Scope</u>

The SME instrument consists of three separate phases and a coaching and mentoring service for beneficiaries. Participants can apply to phase 1 with a view to applying to phase 2 at a later date, or directly to phase 2.

In phase 1, a feasibility study shall be developed verifying the technological/practical as well as economic viability of an innovation idea/concept with considerable novelty to the industry sector in which it is presented (new products, processes, services and technologies or new market applications of existing technologies). The activities could, for example, comprise risk assessment, market study, user involvement, Intellectual Property (IP) management, innovation strategy development, partner search, feasibility of concept and the like to establish a solid high-potential innovation proposal aligned to the enterprise strategy and with a European dimension. Bottlenecks in the ability to increase profitability of the enterprise through innovation shall be detected and analyzed during phase 1 and addressed during phase 2 to increase the return in investment in innovation activities. The proposal should contain an initial business plan based on the proposed idea/concept.

The proposal should give the specifications of the elaborated business plan, which is to be the outcome of the proposal and the criteria for success.

Funding will be provided in the form of a lump sum of EUR 50.000. Proposals should last around 6 months.

In phase 2, innovation projects will be supported that address the specific challenges identified and that demonstrate high potential in terms of company competitiveness and growth underpinned by a strategic business plan. Activities should focus on innovation activities such as demonstration, testing, prototyping, piloting, scaling-up, miniaturization, design, market replication and the like aiming to bring an innovation idea (product, process, service, etc.) to industrial readiness and maturity for market introduction close to deployment and market introduction, but may also include some research. For technological innovation a Technology Readiness Levels of 6 or above (or similar for non-technological innovations) are envisaged; please see part G of the General Annexes.

Proposals shall be based on an elaborated business plan either developed through phase 1 or another means. Particular attention must be paid to IP protection and ownership; applicants will have to present convincing measures to ensure the possibility of commercial exploitation ('freedom to operate').

Proposals shall contain a specification for the outcome of the proposal, including a first commercialization plan, and criteria for success.

The Commission considers that proposals requesting a contribution from the EU of between EUR 0.5 and 2.5 million would allow phase 2 to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. Proposals should last between 12 and 24 months.

In addition, in phase 3, SMEs can benefit from indirect support measures and services as well as access to the financial facilities supported under Access to Risk Finance of this work program.

Successful beneficiaries will be offered **coaching and mentoring support during phase 1 and phase 2**. This service will be accessible via the Enterprise Europe Network and delivered by a dedicated coach through consultation and signposting to the beneficiaries. The coaches will be recruited from a central database managed by the Commission and have all fulfilled stringent criteria with regards to business experience and competencies. Throughout the three phases of the instrument, the Network will complement the coaching support by providing access to its innovation and internationalization service offering. This could include, for example, depending on the need of the SME, support in identifying growth potential, developing a growth plan and maximizing it through internationalization; strengthening the leadership and management skills of individuals in the senior management team and developing in-house coaching capacity; developing a marketing strategy or raising external finance.

1.2. Expected impact

- Enhancing profitability and growth performance of SMEs by combining and transferring new and existing knowledge into innovative, disruptive and competitive solutions seizing European and global business opportunities.
- Market uptake and distribution of innovations tackling the specific challenges in a sustainable way.
- Increase of private investment in innovation, notably leverage of private coinvestments and/or follow-up investments.
- The expected impact should be clearly substantiated in qualitative and quantitative terms (e.g. on turnover, employment, market seize, IP management, sales, return on investment and profit).

1.3. Cut-off dates

Publication date: 11 December 2013 for phase 1 and phase 2.

Opening: 01/03/2014 for phase 1 and phase 2

Cut-off dates

2014		2015	
Phase 1	Phase 2	Phase 1	Phase 2
18/06/2014 24/09/2014 17/12/2014	09/10/2014 17/12/2014	[18/03/2015 17/06/2015 17/09/2015 16/12/2015]	[18/03/2015 17/06/2015 17/09/2015 16/12/2015]

1.4. Eligibility and admissibility conditions

The conditions are described in parts \underline{B} and \underline{C} of the General Annexes to the work programme, with the following exceptions:

- Proposals for phase 1 are not required to provide a draft plan for exploitation and dissemination.
- A proposal for phase 2 shall include a commercialization plan.

SME instrument	At least one SME ¹ . Only applications from for-profit SMEs established in EU Member States or countries associated to Horizon 20204 ² ;
	No concurrent submission or implementation with another phase 1 or phase 2 project^3 .

1.5. Proposal page limits and layout

There are specific proposal templates for <u>SME instrument – Phase 1</u> and <u>for SME instrument</u> – <u>Phase 2</u>.

The cover page, and sections 1, 2 and 3, together should not be longer than 10 pages for phase 1 proposals and 30 pages for phase 2 proposals. The tables in these sections must be included within this limit. The minimum font size allowed is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

¹ For-profit SMEs' means micro-, small- and medium-sized enterprises, as defined in Commission Recommendation 2003/361/EC, that are not 'non-profit legal entities' as defined in the Rules for Participation and Dissemination ('legal entity which by its legal form is non-profit-making or which has a legal or statutory obligation not to distribute profits to its shareholders or individual members').

² In line with the EU 2020 strategy, the SME instrument is designed to promote competitiveness, growth and job creation of European SMEs through delivering innovations for the market place. SMEs will be supported to enhance their innovation capacity and innovation output with growth potential. As the SME instrument aims to bridge the gap between research and development and the commercialisation of innovation, the funding of single company projects is possible. The projects need to have a clear European added value (see Rules for Participation).

³ The SME instrument is targeted at companies that need SME instrument funding as core part of their business strategy to launch a high-potential innovation. It is a competitive scheme in which only the best ideas have a chance to succeed. Consequently SMEs with usually limited absorptions capacities, need to focus their applications but have the chance to come back due to the permanently open call. This way it should also be possible to achieve a reasonable success rate.

1.6. Evaluation criteria, scoring and threshold

The criteria, scoring and threshold are described in part \underline{H} of the General Annexes to the work programme, with the following exceptions:

Proposals will be evaluated individually when they arrive. They will be ranked after the respective cut-off dates.

The criterion Impact will be evaluated first, then Excellence and Implementation. If the proposal fails to achieve the threshold for a criterion, the evaluation of the proposal will be stopped.

For phase 1 the threshold for individual criteria will be 4. The overall threshold, applying to the sum of the three individual scores, will be 13.

For phase 2 the threshold for the criterion Impact will be 4. The overall threshold, applying to the sum of the three individual scores, will be 12.

The final consensus score of a proposal will be the median of the individual scores of the individual evaluators; and the consensus report will comprise a collation of the individual reports, or extracts from them. Where appropriate, a Panel Review will be organised remotely.

Applicants can provide during the electronic proposal submission up to three names of persons that should not act as an evaluator in the evaluation of their proposal for potential competitive reasons⁴.

1.7. Evaluation procedure

For the SME instrument (phases 1 and 2), to determine the ranking, the score for the criterion 'impact' will be given a weight of 1.5

The procedure for setting a priority order for proposals with the same score is given in part \underline{H} of the General Annexes.

The full evaluation procedure is described in the relevant guide associated with the call.

1.8. Indicative timetable for evaluation and grant agreement:

Information on the outcome of the evaluation:

- Two months after the corresponding cut-off date set out above for phase 1 and
- four months after the corresponding cut-off date set out above for phase 2.

Indicative date for the signing of grant agreements:

- One month from the date of informing applicants in phase 1 and
- two months from the date of informing applicants in phase 2.

⁴ If any of the persons identified is an independent expert participating in the evaluation of the proposals for the call in question, they may be excluded from the evaluation of the proposal concerned, as long as it remains possible to have the proposal evaluated.

1.9. Consortium agreements

In the case of two or more SMEs submitting a proposal, in line with the Rules for Participation and the Model Grant Agreement, participants are required to conclude a consortium agreement prior to grant agreement.

2. Budget

Overall budget for 2014 and 2015

Call ID	2014	2015
ICT 37 – 2014/15: Open Disruptive Innovation Scheme	45	45
NMP 25 – 2014/2015: Accelerating the uptake of nanotechnologies, advanced materials or advanced manufacturing and processing technologies by SMEs	21.8	23.8
BIOTEC 5 – 2014/2015: SME boosting biotechnology-based industrial processes driving competitiveness and sustainability	3.8	2.4
SME-SPACE-1-2014/2015	8.5	8.75
PHC 12 – 2014/2015: Clinical validation of biomarkers and/or diagnostic medical devices	66.10	45
SFS-8-2014/2015: Resource-efficient eco-innovative food production and processing	9	17
BG-12-2014/2015Supporting SMEs effort for the development- deployment and market replication of innovative solution for blue growth	3	5
SIE $1 - 2014/2015$: Stimulating the innovation potential of SMEs for a low carbon and efficient energy system	33.95	37.26
IT-1-2014/2015. Small business innovation research for Transport	35.87	38.96
SC5-20-2014/2015: Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials	17	19
INSO-9-2015: Innovative mobile e-government applications by SMEs		4
INSO-10-2015 : SME business model innovation		11
DRS-17-2014/2015 : Protection of urban soft targets and urban critical infrastructures	7	7.4
TOTAL	251.02	264.57

Phase 1 Budget for 2014 and 2015

Budget for phase 1 corresponds to 10% of the overall budget for each topic. The budget available for phase 1 will be divided equally between each cut-off date.

	20	14	2015		
PHASE 1	Budget (M€)	Estimated number of projects*	Budget (M€)	Estimated number of projects *	
ICT 37 – 2014/15: Open Disruptive					
Innovation Scheme	4.5	90	4.5	90	
NMP 25 – 2014/2015: Accelerating the					
uptake of nanotechnologies, advanced					
materials or advanced manufacturing and					
processing technologies by SMEs	2.18	43	2.38	47	
BIOTEC 5 – 2014/2015: SME boosting					
biotechnology-based industrial processes					
driving competitiveness and sustainability	0.38	7	0.24	5	
SME-SPACE-1-2014/2015	0.85	17	0.875	18	
PHC 12 – 2014/2015: Clinical validation of					
biomarkers and/or diagnostic medical devices	6.61	132	4.5	90	
SFS-8-2014/2015: Resource-efficient eco-					
innovative food production and processing	0.9	18	1.7	34	
BG-12-2014/2015Supporting SMEs effort for					
the development-deployment and market					
replication of innovative solution for blue					
growth	0.3	6	0.5	10	
SIE $1 - 2014/2015$: Stimulating the					
innovation potential of SMEs for a low carbon					
and efficient energy system	3.395	67	3.726	74	
IT-1-2014/2015. Small business innovation	,.			, -	
research for Transport	3.587	72	3.896	78	
SC5-20-2014/2015: Boosting the potential of					
small businesses for eco-innovation and a					
sustainable supply of raw materials	1.7	34	1.9	38	
INSO-9-2015: Innovative mobile e-		_			
government applications by SMEs			0.4	8	
INSO-10-2015 : SME business model			···		
innovation			1.1	22	
DRS-17-2014/2015 : Protection of urban soft					
targets and urban critical infrastructures	0.7	14	0.74	15	
Total	25.102	500	26.457	529	

* Fixed lump sum of 50K€

Phase 2 Budget for 2014 and 2015

Budget for phase 2 correspond to 88% of the overall budget. The budget available for phase 2 will be divided equally between each cut-off date.

		14	20	15
PHASE 2	Budget (M€)	Estimated number of projects**	Budget (M€)	Estimated number of projects**
ICT 37 – 2014/15: Open Disruptive				
Innovation Scheme	39.6	26	39.6	26
NMP 25 – 2014/2015: Accelerating the				
uptake of nanotechnologies, advanced				
materials or advanced manufacturing and				
processing technologies by SMEs	19.184	13	20.944	14
BIOTEC 5 – 2014/2015: SME boosting				
biotechnology-based industrial processes				
driving competitiveness and sustainability	3.344	3	2.112	1
SME-SPACE-1-2014/2015	7.48	5	7.7	5
PHC 12 – 2014/2015: Clinical validation of				
biomarkers and/or diagnostic medical devices	58.168	38	39.6	26
SFS-8-2014/2015: Resource-efficient eco-				
innovative food production and processing	7.92	5	14.96	10
BG-12-2014/2015Supporting SMEs effort for				
the development-deployment and market				
replication of innovative solution for blue				
growth	2.64	1	4.4	3
SIE 1 – 2014/2015: Stimulating the				
innovation potential of SMEs for a low carbon				
and efficient energy system	29.876	20	32.7888	22
IT-1-2014/2015. Small business innovation				
research for Transport	31.5656	21	34.2848	23
SC5-20-2014/2015: Boosting the potential of				
small businesses for eco-innovation and a				
sustainable supply of raw materials	14.96	10	16.72	11
INSO-9-2015: Innovative mobile e-		-		
government applications by SMEs			3.52	2
INSO 10-2015: SME business model				
innovation			9.68	6
DRS-17-2014/2015 : Protection of urban soft				
targets and urban critical infrastructures	6.16	4	6.512	4
total	220,8976	146	232,8216	153

** Assumed average EU contribution for phase 2 projects: 1.5 M€

<u>3. Topics</u>

<u>ICT 37 – 2014/15:</u> Open Disruptive Innovation Scheme

Specific Challenge:

The challenge is to provide support to a large set of early stage high risk innovative SMEs in the ICT sector. Focus will be on SME proposing innovative ICT concept, product and service applying new sets of rules, values and models which ultimately disrupt existing markets.

The objective of the ODI is threefold:

- Nurture promising innovative and disruptive ideas;
- Support their prototyping, validation and demonstration in real world conditions;
- Help for wider deployment or market uptake.

Proposed projects should have a potential for disruptive innovation and fast market up-take in ICT.

In particular it will be interesting for entrepreneurs and young innovative companies that are looking for swift support to their innovative ideas.

The ODI objective will support the validation, fast prototyping and demonstration of disruptive innovation bearing a strong EU dimension.

Budget

	2014		2	015
ICT 37 – 2014-15: Open		Estimated		Estimated
Disruptive Innovation Scheme	(M€)	number of	(M€)	number of
		projects*		projects**
Global	45		45	
Phase 1	4.5	90	4.5	90
Phase 2	39.6	26	39.6	26
Mentoring & coaching support and phase 3.	0.9		0.9	

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

<u>NMP 25 – 2014/2015</u>: Accelerating the uptake of nanotechnologies, advanced materials or advanced manufacturing and processing technologies by SMEs

Specific challenge

Research results should be taken up by industry, harvesting the hitherto untapped potential of nanotechnologies, advanced materials and advanced manufacturing and processing technologies. The goal is to create added value by creatively combining existing research results with other necessary elements, to transfer results across sectors where applicable, to accelerate innovation and eventually create profit or other benefits. The research should bring the technology and production to industrial readiness and maturity for commercialization after the project.

Budget

NMP 25 – 2014/2015:	2014		2	015
Accelerating the uptake of nanotechnologies, advanced materials or advanced manufacturing and processing technologies by SMEs	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global	21.80		23.80	
Phase 1	2.18	43	2.38	48
Phase 2	19.184	13	20.944	14
Mentoring & coaching support and phase 3.	0.44		0.48	

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

<u>BIOTEC 5 – 2014/2015:</u> SME-boosting biotechnology-based industrial processes driving competitiveness and sustainability

Specific challenge

The large numbers of SMEs which characterize the EU biotechnology sector are playing a crucial role in the move to competitive and sustainable biotechnology-based processes. These SMEs are characterized by their research intensity and long lead times between early technological development and market introduction. They therefore need to be supported to overcome the so-called "valley of death".

Budget

BIOTEC 5 – 2014/2015:	2014		2015		
SME-boosting biotechnology- based industrial processes driving competitiveness and sustainability	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**	
Global	3.8		2.4		
Phase 1	0.38	8	0.24	5	
Phase 2	3.344	3	2.112	2	
Mentoring & coaching support and phase 3.	0.08		0.05		

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

<u>SME-SPACE-1-2014/2015</u>

Specific challenge

To engage small and medium enterprises in space research and development, especially those not traditionally involved in it and reduce as much as possible the entry barriers to SMEs for Horizon 2020 funding.

The specific challenge of the actions envisaged under this call could cover any aspect of the Specific Program for Space [Horizon 2020 Framework programme and Specific programme]. However, it is considered that actions in the areas of applications, especially in connection to the flagship programs Galileo and Copernicus, spinning-in (i.e. application of terrestrial solutions to challenges in space) and the development of certain critical technologies could be adequately suited for this call.

Budget

	2014		2	015
H2020-SME-SPACE-2014-		Estimated		Estimated
2015	(M€)	number of	(M€)	number of
		projects*		projects**
Global	8.5		8.75	
Phase 1	0.85	17	0.875	18
Phase 2	7.48	5	7.7	5
Mentoring & coaching support and phase 3.	0.17		0.175	

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

<u>SFS-8-2014/2015:</u> Resource-efficient eco-innovative food production and processing

Specific Challenge:

To remain competitive, limit environmental degradation and optimise the efficient use of resources, the development of more resource-efficient and sustainable food production and processing, throughout the food system, at all scales of business, in a competitive and innovative way is required. Current food production and processing systems, especially in the SME sector, need to be revised and optimized with the aim of achieving a significant reduction in water and energy use, greenhouse gas emissions and waste generation, while at the same time improving the efficiency in the use of raw materials, increasing climate resilience and ensuring or improving shelf life, food safety and quality. New competitive eco-innovative processes should be developed, within the framework of a transition towards a more resource-efficient, sustainable circular economy.

Budget

SFS-8-2014/2015: Resource-	2014		2015	
efficient eco-innovative food production and processing	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global	9		17	
Phase 1	0.9	18	1.7	34
Phase 2	7.92	5	14.96	10
Mentoring & coaching support and phase 3.	0.18		0.34	

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

<u>BG-12-2014/2015</u>: Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth

Specific Challenge:

The potential of Europe's Oceans, seas and coasts is significant for job and growth creation if the appropriate investments in research and innovation are made. SMEs contribution to the development of the 'Blue Growth Strategy' (COM (2012) 494) can be significant in particular in the fields of marine biotechnology (related applications, key tools and technologies) as well as aquaculture related marine technologies and services.

However, SMEs lack access to finance to develop their activities and the economic and financial crisis has made access to finance even more difficult. This is particularly true in the previously mentioned maritime sectors, where access to finance for SMEs is considered as one of the most important barriers for the development of innovative maritime economic activities⁵.

Budget

BG-12-2014/2015: Supporting	20	014	2015	
SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global	3		5	
Phase 1	0.3	6	0.5	10
Phase 2	2.64	1	4.4	3
Mentoring & coaching support and phase 3.	0.06		0.1	

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

⁵ Blue Growth Study - Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts – Ecorys, 2012

<u>SIE 1 – 2014/2015</u>: Stimulating the innovation potential of SMEs for a low carbon and efficient energy system

Specific Challenge:

SMEs play a crucial role in developing resource-efficient, cost-effective and affordable technology solutions to decarbonise and make more efficient the energy system in a sustainable way. They are expected to strongly contribute to one or a combination of more than one of the challenges outlined in the legal base of the Horizon 2020 Societal Challenge 'Secure, Clean and Efficient Energy'99, in particular with regard to :

- Reducing energy consumption and carbon footprint by smart and sustainable use (including energy-efficient products and services as well as 'Smart Cities and Communities'),
- Low-cost, low-carbon electricity supply (including renewable energy as well as CCS and re-use),
- Alternative fuels and mobile energy sources,
- A single, smart European electricity grid,
- New knowledge and technologies, and
- Robust decision making and public engagement.

Budget

SIE 1 – 2014/2015:	20	014	2015	
Stimulating the innovation potential of SMEs for a low carbon and efficient energy system	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global	33.95		37.26	
Phase 1	3.395	67	3.726	74
Phase 2	29.876	20	32.789	22
Mentoring & coaching support and phase 3.	0.68		0.74	

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

The budget available for phase 1 and phase 2 will be divided equally between each cut-off date Phase 1: 3 cut-off dates in 2014 and 4 cut-off dates in 2015 Phase 2: 2 cut-off dates in 2014 and 4 cut-off dates in 2015

€

<u>IT.1-2014-2015</u>: Small business innovation research for Transport

Specific challenge:

The European transport sector must have the capacity to deliver the best products and services, in a time and cost efficient manner, in order to preserve its leadership and create new jobs, as well as to tackle the environmental and mobility defies. The role of SMEs to meet these challenges is critical as they are key players in the supply chains. Enhancing the involvement of weaker players in innovation activities as well as facilitating the start-up and emergence of new high-tech SMEs is of paramount importance.

Budget

IT.1-2014-2015:	20	2014		2015	
Small business innovation research for Transport	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**	
Global	35.87		38.96		
Phase 1	3.587	72	3.896	78	
Phase 2	31.566	21	34.285	23	
Mentoring & coaching support and phase 3.	0.72		0.78		

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

<u>SC5-20-2014/2015</u>: Boosting the potential of small businesses for ecoinnovation and a sustainable supply of raw materials

Specific challenge:

Innovative SMEs have been recognized as being able to become the engine of the green economy and to facilitate the transition to a resource efficient, circular economy. They can play an important role in helping the EU to exit from the economic crises and in job creation. The potential of commercializing innovative solutions from SMEs is however hindered by several barriers including the absence of the proof of concept, the difficulty to access risk finance, the lack of prototyping, insufficient scale-up studies, etc. Growth therefore needs to be stimulated by increasing the levels of innovation in SMEs, covering their different innovation needs over the whole innovation cycle.

Innovative SMEs should be supported and guided to reach and accelerate their full green growth potential. This topic is targeted at all types of eco-innovative SMEs in all areas addressing the climate action, environment, resource efficiency and raw materials challenge, focusing on SMEs showing a strong ambition to develop, grow and internationalize. All kinds of promising ideas, products, processes, services and business models, notably across sectors and disciplines, for commercialisation both in a business-to-business (B2B) and a business-to-customer (B2C) context, are eligible.

Budget

SC5-20-2014/2015:	20	014	2015	
Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global	17		19	
Phase 1	1.7	34	1.9	38
Phase 2	14.96	10	16.72	11
Mentoring & coaching support and phase 3.	0.34		0.38	

* fixed lump sum of 50K€
** Assumed average EU contribution of 1.5 M€

INSO-9-2015: Innovative mobile e-government applications by SMEs

Specific challenge:

Current societal and economic challenges as well as rising expectations to reduce the burden on users, put pressure on all public administrations to provide efficient, open and citizencentric public services.

Due to the increased use of mobile technology as well as the increasing availability of public information, data and online services, public services can be transformed. Coupling open public data and services with information and services offered by the private sector can lead to innovative, user-friendly and personalised services that can be accessed easily.

Because of their size, knowledge and agility, SMEs are key actors for the provision of those innovative services. The "apps" market for mobile devices is a very dynamic market, which mostly lacks application specifically for the public sector. Engaging SMEs into the potentially huge public sector innovation market is a challenge for local and regional public authorities.

The scope of this action is to provide support to innovative SMEs, including start-ups, for the design and creation of innovative applications, in order to foster the delivery of mobile public services.

The aim is to help the interaction of citizens and businesses with public administrations. This may be done through the combination of public and private sector services, through mobile technologies. Although they may be first piloted in a local context – with the involvement of public administrations and end users - the solutions need to ensure replicability, also taking into account multi-lingualism and, where necessary, the cross-border dimension. Scalability and sustainability issues are to be considered.

Duuget				
SC5-20-2014/2015:	2014		2015	
Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global			4	
Phase 1			0.4	8
Phase 2			3.52	2
Mentoring & coaching support and phase 3.			0.08	

Budget

* fixed lump sum of 50K€

** Assumed average EU contribution of 1.5 M€

INSO-10-2015: SME business model innovation

Specific challenge:

Technologies and services as such do not have a specific value. Their value is determined by the business models used to bring them to a market.

Many current, widely applied business models, have developed for big companies and may be not-fitting or not-serving well the needs of SMEs nor be inspired by new knowledge on innovation in business models. In addition to this, small community-oriented companies, using their profits primarily for social objectives⁶, can build their growth on business model innovation.

The specific challenge addressed by this topic is to enable SMEs - in traditional sectors, such as manufacturing industries, in sectors of particularly rooted in Europe's history such as cultural heritage as well as in new sectors including different services and creative industries, and the social economy – to innovate and grow across traditional boundaries, through new business models and organisational change. The international dimension is included. For instance, this can involve drawing on successful business models in different sectors in the global market, and developing them for use by European SMEs in the same or different sectors. It can also involve reverse innovation in business models, where models initially created in Europe and becoming successful elsewhere, are supported to return to Europe. For business model innovation in the broad area of food, it is foreseen to organize several events in the autumn of 2015 within an appropriate European level forum. Of particular importance for the new business models will be user-oriented services, cultural heritage related services, social services and tourism. The SME instrument, providing the phased approach and mentoring schemes needed, so that the participating SMEs can build successful strategies to achieve growth, is an appropriate instrument to address this challenge.

Budget

SC5-20-2014/2015:	2014		2015	
Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global			11	
Phase 1			1.1	22
Phase 2			9.68	6
Mentoring & coaching support and phase 3.			0.22	

* fixed lump sum of 50K€ / ** Assumed average EU contribution of 1.5 M€ The budget available for phase 1 and phase 2 will be divided equally between each cut-off date Phase 1: 3 cut-off dates in 2014 and 4 cut-off dates in 2015

⁶ A social enterprise is defined as an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. See: SOCIAL BUSINESS INITIATIVE

http://ec.europa.eu/internal_market/social_business/docs/COM2011_682_en.pdf

Phase 2: 2 cut-off dates in 2014 and 4 cut-off dates in 2015 <u>DRS-17-2014/2015</u>: Protection of Urban soft targets and urban critical infrastructures

Specific Challenge:

The aim is to engage small and medium enterprises in security research and development and in particular to facilitate and accelerate the transition of their developed products/services to the market place.

The specific challenge of the actions and activities envisaged under this topic are related to protection of urban soft targets and urban critical infrastructures.

Specific consideration should be given to 'urban soft targets', which are exposed to increasing security threats which can be defined as urban areas into which large numbers of citizens are freely admitted, for usual activities or special events or routinely reside or gather. Among others, these include parks, squares and markets, shopping malls, train and bus stations, passenger terminals, hotels and tourist resorts, cultural, historical, religious and educational centres and banks.

The critical infrastructures sectors listed in the European Programme for Critical Infrastructures Protection (EPCIP)20, including, among others, energy installations and networks, communications and information technology, finance (banking, securities and investment), water (dams, storage, treatment and networks), supply chain and government (e.g. critical services, facilities, information networks, assets and key national sites and monuments) are not only relevant at a national scale but they can be considered critical infrastructures in an urban context as well.

The objective is to carry out a small-scale demonstration of innovative technologies and tools.

Taking into consideration the results of past and on-going EU and international research in this field, they can cover any aspect of the urban critical infrastructure protection, such as, for example: designing buildings and urban areas; protection of energy/transport/communication grids; critical infrastructure surveillance solutions; protecting supply chains; avoiding cyber-attacks and developing cyber resilience systems for critical infrastructures.

The scope of this topic is focused to cover, for example:

- high throughput screening of people and their bags including the ability to screen them in reasonably real-time as people approach entrances to buildings or enter public transportation system;
- high throughput screening for vehicles to identify threats that warrant further inspection (as opposed to random searching);
- potential CBRN-E threats and the way in which these threats could be carried-out against soft targets and critical infrastructures;
- mitigation of vehicle-borne improvised explosive devices, with a specific focus on vehicle-borne ones (e.g. in cases of parked vehicles, penetrative attacks, etc.).

The action is expected to proactively target the needs and requirements of users, such as national law enforcement agencies public and and private operators of critical infrastructures and networks.

Budget

DRS-17 2014/2015:	2	014	2	015
Critical infrastructure protection topic 7: SME instrument topic: "Protection of Urban soft targets and urban critical infrastructures"	(M€)	Estimated number of projects*	(M€)	Estimated number of projects**
Global	7		7.4	
Phase 1	0.7	14	0.74	15
Phase 2	6.16	4	6.512	4
Mentoring & coaching support and phase 3.	0.14		0.148	

* fixed lump sum of 50K€ / ** Average size of 1.5 M€

<u>4. Specific Topic</u>

<u>PHC 12 – 2014/2015:</u> Clinical validation of biomarkers and/or diagnostic medical devices

Specific challenge:

Specific challenge: Biomarkers are used in clinical practice to describe both normal and pathological conditions. They can also have a prognostic or a predictive power. They are therefore increasingly used in medicine and many potential biomarkers are proposed every year.

Only a few of them are however validated for use in a clinical research setting. Such validation implies the demonstration of a link to a pertinent clinical endpoint or process, as well as a robust and appropriate analytical method.

The clinical validation of biomarkers will be increasingly important for the development of new diagnostics, and this is a research area where many small European companies are active.

Improved clinical decisions should lead to better health outcomes while contributing to the sustainability of the health care system.

Scope:

The SME instrument consists of three separate phases and a coaching and mentoring service for beneficiaries. Participants may apply to phase 1 with a view to applying to phase 2 at a later date, or directly to phase 2.

Proposals submitted to phase 1 shall consist of a draft business plan and feasibility study verifying the technological/practical and economic viability of the clinical validation proposed. These may, for example, comprise risk assessment, market study, user involvement, intellectual property (IP) management, innovation strategy development, partner search, feasibility of concept etc. Proposals may analyse bottlenecks preventing advance of the applicant SME in this area and identify how a phase 2 proposal may contribute to attaining growth or sustainability.

The main outcome of the proposal should be a detailed business plan. Funding for phase 1 will be provided in the form of a lump sum of EUR 50.000 and proposals should have a duration of around 6 months.

In phase 2 proposals should address the specific challenge described, elaborated in the scope section above, and demonstrate high potential in terms of applicant's competitiveness and growth underpinned by a strategic business plan.

Proposals shall be based on a business plan developed either through phase 1 or another means. Particular attention must be paid to IP protection and ownership; applicants should provide evidence of the possibility of commercial exploitation ('freedom to operate').

The clinical validation of existing potential biomarkers (not the identification of new ones) is sought. This validation should provide evidence for: high analytical validity; appropriate sensitivity and specificity; clinical validity/ utility. Preference will be given to validation of biomarkers with high potential for short term uptake into clinical practice.

In addition, validation of the clinical performance of new diagnostic devices can be supported, either in combination with the biomarker validation, or against existing standards.

Both in vivo and in vitro potential biomarkers are eligible. Preference will be given to the validation of disease related biomarkers (i.e. diagnostic, susceptibility/risk, monitoring and prognostic biomarkers)

Proposals shall contain a specification for the outcome of the project, including a first commercialisation plan, and criteria for success.

The Commission considers that phase 2 proposals requesting a contribution from the EU of between EUR 1 and 5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. Phase two projects should duly justify their duration making reference to obtaining patient samples, ensuring patient follow up, etc.

In addition, in phase 3, SMEs can benefit from indirect support measures and services as well as access to the financial facilities supported under Access to Risk Finance of this work programme.

Successful beneficiaries will be offered coaching and mentoring support during phase 1 and phase 2. This service will be accessible via the Enterprise Europe Network (EEN) and provided by a dedicated coach through consultation to the beneficiaries. The coaches will be recruited from a database managed by the Commission and on the basis of their business experience and competencies. Throughout the three phases of the instrument, the EEN will complement coaching support by providing access to its innovation and internationalisation services. This may include, for example, depending on the needs of the SME, support in identifying growth potential, developing a growth plan and maximising it through internationalisation; strengthening the leadership and management skills of individuals in the senior management team and developing in-house coaching capacity; developing a marketing strategy or raising external finance

Expected impact: This should provide:

- Increased clinical availability and exploitation of biomarkers for the benefit of the patient.
- New diagnostic devices.
- Facilitation of entry of improved diagnostics in the clinic and the market.
- Support for the implementation of the Commission proposal for a revised in vitro diagnostic devices regulation⁷.
- Enhancing profitability and growth performance of SMEs by combining and transferring new and existing knowledge into innovative, disruptive and competitive solutions seizing European and global business opportunities.
- Contribution to the sustainability of health care systems.
- Increased likelihood of market uptake and distribution of resulting innovations tackling the abovementioned specific challenge(s) in a sustainable way.
- Leveraging of private investment in clinical validation as described above, notably leverage of private co-investor and/or follow-up investments.

⁷ Proposal for a regulation of the European Parliament and Council on in vitro diagnostic medical devices COM(2012)541 final

Type of action

Type of action: SME instrument (100% funding)

While all other instances of the use of the SME instrument in Horizon 2020 provide for reimbursement at 70%, the predominance of research type activities in clinical validation necessitate reimbursement at 100% in this case.

Budget

PHC 12 – 2014/2015:	2014		2015	
Clinical validation of		Estimated		Estimated
biomarkers and/or diagnostic	(M€)	number of	(M€)	number of
medical devices		projects*		projects**
Global	66.1		45	
Phase 1	6.61	132	4.5	90
Phase 2	58.1687	38	39.6	26
Mentoring & coaching support and phase 3.	1.32		0.9	

* fixed lump sum of 50K€ / ** Average size of 1.5 M€

5. Specific Provisions and funding rates

(General Annexes to the main Work Programme – D. Types of action)

SME instrument

Description: The SME instrument is targeted at all types of innovative SMEs showing a strong ambition to develop, grow and internationalise. It provides staged support covering the whole innovation cycle in three phases complemented by a mentoring and coaching service. Transition from one phase to the next will be seamless provided the SME project proves to be worth further support in a further evaluation. Each phase is open to new entrants.

a) SME instrument (phase 1)

Description: Feasibility study verifying the technological/practical as well as economic viability of an innovation idea/concept with considerable novelty to the industry sector in which it is presented (new products, processes, design, services and technologies or new market applications of existing technologies). The activities could, for example, comprise risk assessment, market study, user involvement, Intellectual Property management, innovation strategy development, partner search, feasibility of concept and the like to establish a solid high-potential innovation project aligned to the enterprise strategy and with a European dimension. Bottlenecks in the ability to increase profitability of the enterprise through innovation shall be detected and analysed during phase 1 and addressed during phase 2 to increase the return in investment in innovation activities.

Funding rate: Funding will be provided in the form of a lump sum of EUR $50,000^8$.

b) SME instrument (phase 2)

Description: innovation projects that address a specific challenge and demonstrate high potential in terms of company competitiveness and growth underpinned by a strategic business plan. Activities should focus on innovation activities such as demonstration, testing, prototyping, piloting, scaling-up, miniaturisation, design, market replication and the like aiming to bring an innovation idea (product, process, service etc) to industrial readiness and maturity for market introduction, but may also include some research.

In exceptional circumstances, duly justified by the character of an area, a topic may provide for actions where the research component is strongly present, as an alternative to the innovation actions described above.

SMEs can subcontract work and knowledge that is essential for their innovation project in the spirit of the innovation voucher concept.

Proposals should be based on a strategic business plan either developed through phase 1 or another means.

⁸ C(2013)8198 authorizing the reimbursement of cost under the form of a lump sum for SME instrument phase 1 actions under Framework Programme Horizon 2020 states that the total eligible cost for a phase 1 project is EUR 71.249. Applying the co-financing rate of 70%, the amount of the grant is established at EUR 50.000.

Funding rate: 70% (exceptionally, 100% where the research component is strongly present). The single applicable rate is specified under the relevant topic.

c) SME instrument (phase 3): Support to commercialisation promotes the wider implementation of innovative solutions and customers and supports financing of growth by facilitating access to public and private risk capital. This stage will not provide for direct funding, but SMEs can benefit from indirect support measures and services as well as access to the financial facilities supported under Horizon 2020.

d) **Mentoring and coaching**: Each beneficiary of the SME instrument will be offered business coaching support during Phase 1 (up to 3 coaching days) and Phase 2 (up to 12 coaching days) in addition to the grant offered. This support will be provided through the Enterprise Europe Network (EEN) and delivered by a group of qualified and experienced business coaches. The local EEN office will introduce the beneficiary to the coaching process and propose a selection of coaches from the database managed by the Commission for the beneficiary to choose from. The objective is to accelerate the impact of the support provided through the SME instrument and to equip beneficiaries with the necessary skills, business processes and relevant competencies for long-term growth. Phase 3 does not include individual business coaching, but SME instrument participants will be able to count on continuing EEN support in linking to relevant support services within the Network, regionally or nationally. It is important to note that the objective of coaching is not to support the company in project management or reporting obligations related to Horizon 2020 participation. This stage will not provide for direct funding.