



Ministry of Higher Education
and Science

Danish Agency for Science,
Technology and Innovation

SMEs in Horizon 2020

Opportunities and experiences so far...

Marlis Erichsen

NCP – Innovation in SMEs,

Marie Skłodowska-Curie Actions,

Secure societies

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EuroCenter

National Contact Points (NCP)

- Free advice on Horizon 2020 - by telephone, e-mail and individual meetings
- Courses on financial rules, application writing, reporting etc. (participant fee)

Programme Committee members

- Promote Danish interests



SMV-instrument topics i Horizon 2020

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EXCELLENT SCIENCE

European Research Council

17%

Future and Emerging Technologies

17,6%

3,5%

Marie Skłodowska-Curie actions

8%

3,69%

Research Infrastructures

3,23%

Widening Participation: 1,06%

Science with and for society: 0,6%

EIT: 3,52%

JRC: 2,47%

INDUSTRIAL LEADERSHIP

Leadership in enabling and industrial technologies (IKT, nano, materials, biotechnology)

Access to Risk Finance

Innovation in SMEs

0,8%

SOCIETAL CHALLENGES

Health, demographic change and well-being;

9,7%

Food, Agriculture, Bioeconomy etc.

5%

Secure, clean and efficient energy;

7,7%

Smart, green and integrated transport;

8,23%

Climate action, resource efficiency and raw materials;

4%

Inclusive, innovative and reflective societies.

1,7%

Secure Societies

2,2%



9 months into Horizon implementation. SMEs represent...

- 1/4 of applicants (24.82%)
- 1/5 of beneficiaries (19.55%)
- 1/6 of budget allocation (16.18%)



Opportunities for SMEs (I)

- **SME-oriented R&I-topics**, which are provided in Work Programmes (WP) under
 - Leadership in enabling and industrial technologies (pillar2)
 - Societal Challenges (pillar 3)

- **SME-instrument** (particular type of project), which is provided in WPs under
 - Leadership in enabling and industrial technologies (pillar 2)
 - Societal Challenges (pillar 3)



Opportunities for SMEs (II)

- **Fast track to innovation** (particular type of project as of 2015), provided in Work Programmes (WP) under pillar 2 and 3
 - Bottom up – within the framework of the given work programme
 - Greater emphasis on the "impact"-criterion during evaluation
 - Maximum support rate 3 mio. Euro
 - Time-to grant max. 6 months
 - Permanently open call – three cut-off dates per year
 - Small consortia (3-5 partners)

- **Eurostars** (particular programme with national co-funding)
 - Close-to-market projects
 - Addressed towards research intensive SMEs
 - Projects of max. 3 years duration. Max 5 years from market introduction
 - Small consortia dominated by research intensive SME

<http://www.eurostars-eureka.eu/>



Opportunities for SMEs (III)

■ Marie Skłodowska-Curie Actions (Programme under pillar 1)

- "Free" researcher (ER) or Ph.d. (ESR)
(secondment to company)
- 2 possibilities:
 - SME becomes part of a network with research institutions
 - SME hosts Industrial Doctorates
- Bottom up

For MSCA: first information confirms that SMEs have found their way to this scheme:

- 11.76% of applicants are SMEs
- 13.77% of beneficiaries are SMEs (// close to 15 % in FP7)
- 10.31% of the budget goes to SMEs (// close to 11% in FP7)
- 19.27% of SME applicants are successful (vs. 16.45% of all applicants)



Marie Skłodowska-Curie Actions – researcher mobility

Companies can:

- Cooperate with research institutions
- Gain access to equipment, which only exists in academic institutions
- Create a connection between some of the highly qualified researchers from universities and the research activities of the company
- http://ec.europa.eu/research/mariecurieactions/about-msca/industry-sme/index_en.htm
- <http://ufm.dk/forskning-og-innovation/tilskud-til-forskning-og-innovation/eu-og-internationale-programmer/eus-forsknings-og-innovationsprogram-horizon-2020/forskermobilitet-og-uddannelse>



Call deadlines 2015

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Call ID	Call Opens	Call Deadline	Budget (Mio EUR)
H2020-MSCA-ITN-2015	2-Sep-2014	13-Jan-2015	370.00
H2020-MSCA-RISE-2015	6-Jan-2015	28-Apr-2015	80.00
H2020-MSCA-IF-2015	12-Mar-2015	10-Sep-2015	215.00
H2020-MSCA-COFUND-2015	14-Apr-2015	1-Oct-2015	80.00



The SME Instrument

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SEAMLESS BUSINESS INNOVATION SUPPORT FROM IDEA TO MARKET...



...YOUR HIGHWAY TO DELIVER INNOVATION ON THE MARKET!

Apply at any time!

6 months

88% budget

12-24 months

ACTIVITIES SUPPORTED

PROOF OF CONCEPT

- ✓ Prove Technical and Commercial Viability
- ✓ Explore IP Regime
- ✓ Design Study
- ✓ Develop Pilot Application
- ✓ Risk Assessment

DEMONSTRATION OF COMMERCIAL POTENTIAL via

- ✓ Prototyping
- ✓ Testing
- ✓ Piloting
- ✓ Miniaturization
- ✓ Scaling-up
- ✓ Application Development

GO-TO-MARKET

- ✓ EU Quality Label (Promotion & Networking with Financiers/Clients)
- ✓ Investment Readiness Training
- ✓ SME window in the EU Financial Facilities (debt & equity backed by EIB/EIF)
- ✓ Link to Public Procurement Networks

Target group of the SME-Instrument

“Premier League”

“Highly innovative firms that are ambitious and have the potential to develop, grow and have a European or international impact”.

“Advisable that the SME has, and can demonstrate, a good knowledge and experience in the markets it intends to master”.

“Companies which follow a development strategy that pursues breakthrough innovation and/or the potential to disrupt existing markets”.

The European Commission

<http://ec.europa.eu/easme/sme/>



Technology Readiness Levels

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in lab

TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

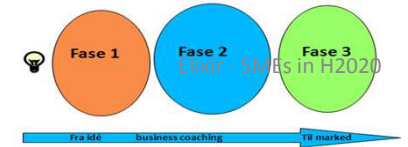
TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)





Phase 1

**Concept &
Feasibility
Assessment**



Target group:

- A single enterprise or a consortium of private enterprises (for profit)
- Focus on growth enterprises
- Projects with potential for European added value

Input and outcome:

Initial business plan -> Elaborated Business Plan

Call dates and time to grant:

Permanently open call – 4 cut-off dates annually
2+1 months

Size of grant:

50.000 euros – lump sum (70%)

NB: if only parts of the activities are finalized, the total grant amount must be returned.

Project duration

6 months



Phase 1 - Proposal

max. 10 pages

Excellence

- 1.1 Objectives
- 1.2 Relation to the work programme
- 1.3 Concept and approach
- 1.4 Ambition

Impact

- 2.1 Expected Impacts
 - a) Users/ Market
 - b) Company
- 2.2 Measures to maximise impact
 - a) Dissemination and exploitation of results
 - b) Intellectual property, knowledge protection and regulatory issues

Implementation

- 3.1 Work plan – work package and deliverable
- 3.2 Management structure and procedures (only to the extent relevant)
- 3.3 Consortium as a whole (if applicable)
- 3.4 Resources to be committed – include a fixed budget table (no modifications possible)

Members of the consortium and third parties involved in the project (**subcontracts**)

Ethics and security





Phase 2



Can be applied for directly without previous participation in Phase 1

Target group:

- A single enterprise or a consortium of private enterprises (for profit)
- Focus on growth enterprises
- Projects with potential for European added value

Input og outcome:

Elaborated business plan -> Investor ready business plan

Call dates and time to grant:

Permanently open call – 4 cut-off dates annually
4+2 months

Size of grant:

Typically 0.5-2.5 mio. Euro (70 % + 25%)
(exception: PHC research projects 100 %+25%)

Project duration Ca. 12-24 months.

Phase 2 - Proposal

max. 30 pages
Proposals shall be based on a feasibility study and contain an elaborated business plan

Excellence

- 1.1 Objectives
- 1.2 Relation to the work programme
- 1.3 Concept and approach
- 1.4 Ambition

Impact

- 2.1 Expected Impacts
 - a) Users/ Market
 - b) Company
- 2.2 Measures to maximise impact
 - a) Dissemination and exploitation of results
 - b) Intellectual property, knowledge protection and regulatory issues
 - c) Communication

Implementation

- 3.1 Work plan – work package and deliverable
- 3.2 Management structure and procedures (only to the extent relevant)
- 3.3 Consortium as a whole (if applicable)
- 3.4 Resources to be committed – (table on person months and possibly other direct costs)

Members of the consortium and third parties involved in the project (**subcontracts**)

Ethics and security



**Concept &
Feasibility
Assessment**

**Demonstration
Market Replication
Research
Development
Miniaturisation
Testing
Piloting
Prototyping
Scaling up**

**Support
No direct funding**

IDEA business coaching throughout the project

MARKET



Cut-off dates 2014/2015

Cut-off dates

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

Themes	Call id 2014		Call id 2015	
	Phase 1	Phase 2	Phase 1	Phase 2
High risk ICT innovation	ICT-37-2014-1 90 projects €4.5m	ICT-37-2014 ~26 projects €40m	ICT-37-2015-1 90 projects €4.5m	ICT-37-2015 ~26 projects €40m
Nanotech, or other advanced tech for manufacturing and materials	NMP-25-2014-1 43 projects €2.2m	NMP-25-2014 ~13 projects €19m	NMP-25-2015-1 47 projects €2.4m	NMP-25-2015 14 projects €21m
Space research and development	Space-SME-2014-1 17 projects €0.8m	Space-SME-2014-2 ~5 projects €7.5m	Space-SME-2015-1 18 projects €0.9m	Space-SME-2015-2 ~13 projects €7.7m
Diagnostics devices and biomarkers	PHC-12-2014-1 132 projects €6.6m	PHC-12-2014 ~38 projects €53m	PHC-12-2015-1 90 projects €4.5m	PHC-12-2015 ~26 projects €40m
Sustainable food production and processing	SFS-08-2014-1 18 projects €0.9m	SFS-08-2014 ~5 projects €8m	SFS-08-2015-1 18 projects €1.7m	SFS-08-2015 ~10 projects €15m
Seas and oceans (Blue growth)	BG-12-2014-1 6 projects €0.3m	BG-12-2014 1-2 projects €2.6m	BG-12-2015-1 10 projects €0.5m	BG-12-2015 2-3 projects €4m
Low carbon energy systems	SIE-01-2014-1 67 projects €3.4m	SIE-01-2014 ~20 projects €29m	SIE-01-2015-1 74 projects €3.7m	SIE-01-2015 ~22 projects €31m
Greener and more integrated transport	IT-1-2014-1 72 projects €3.6m	IT-1-2014 ~21 projects €32m	IT-1-2015-1 78 projects €3.9m	IT-1-2015 23 projects €34m
Eco-innovation and sustainable raw material supply	SC5-20-2014-1 ~34 projects €1.7m	SC5-20-2014 ~10 projects €15m	SC5-20-2015-1 38 projects €1.9m	SC5-20-2015 ~11 projects €17m
Urban critical infrastructure	DRS-17-2014-1 14 projects €0.7m	DRS-17-2014 4 projects €6m	DRS-17-2015-1 14 projects €0.7m	DRS-17-2015 ~4 projects €6.5m
Biotechnology-based industrial processes	BIOTEC-5a-2014-1 8 projects €0.4m	BIOTEC-5a-2014 ~2 projects €3.3m	BIOTEC-5b-2015-1 5 projects €0.2m	BIOTEC-5b-2015 1 project €2m
Mobile e-government applications	-	-	INSO-9-2015-1 8 projects €0.4m	INSO-9-2015 ~2 projects €3.5m
SME business model innovation	-	-	INSO-10-2015-1 22 projects €1.1m	INSO-10-2015 ~6 projects €9m
TOTAL	~500 projects	~145 projects	~510 projects	~160 projects

Results from the first cut-off for Phase 1

Overall:

2602 applications received

155 succesful applications

317 (12 %) applications over threshold

85 % of all applications were sent within the last 48 hours before the cut-off date

434 experts were used

DK:

72 Danish applications were sent

4 succesful applications (IKT, transport, 2 x nano)

60 applications under threshold



6 lessons learnt from the first round

– tips for future applicants

1. Too much focused on the project and **not enough on the business opportunity**;
2. Not convincing when **describing the company** (you have to explain why your company will succeed and not your competitor);
3. Not providing enough information on **competing solutions**;
4. Having a **too low level of innovation**, planning to develop a product that already exists on the market;
5. Proposing just an idea **without any concept for its commercialization**;
6. Just **trying their luck** (the SME Instrument is not a lottery!).

EASME: <http://ec.europa.eu/easme/en/news/sme-instrument-statistics-first-cut-date-phase-1-released>

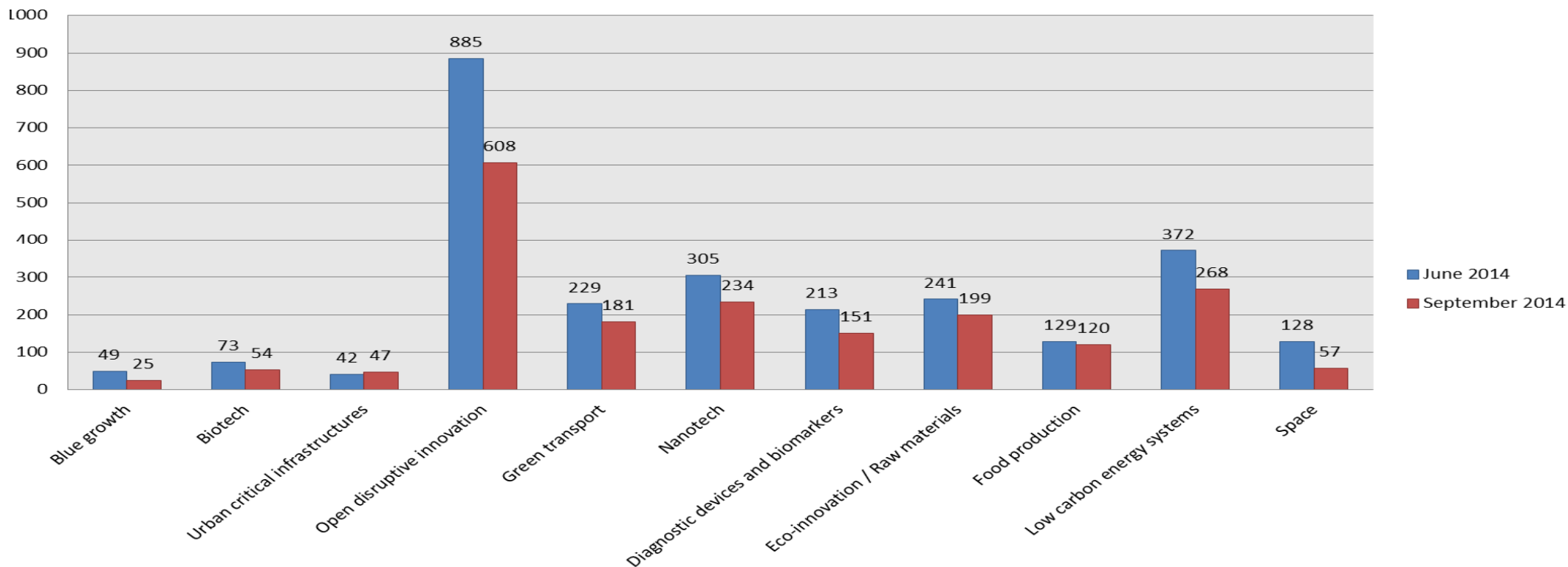


Number of proposals submitted by topic for the 2 cut-off dates:

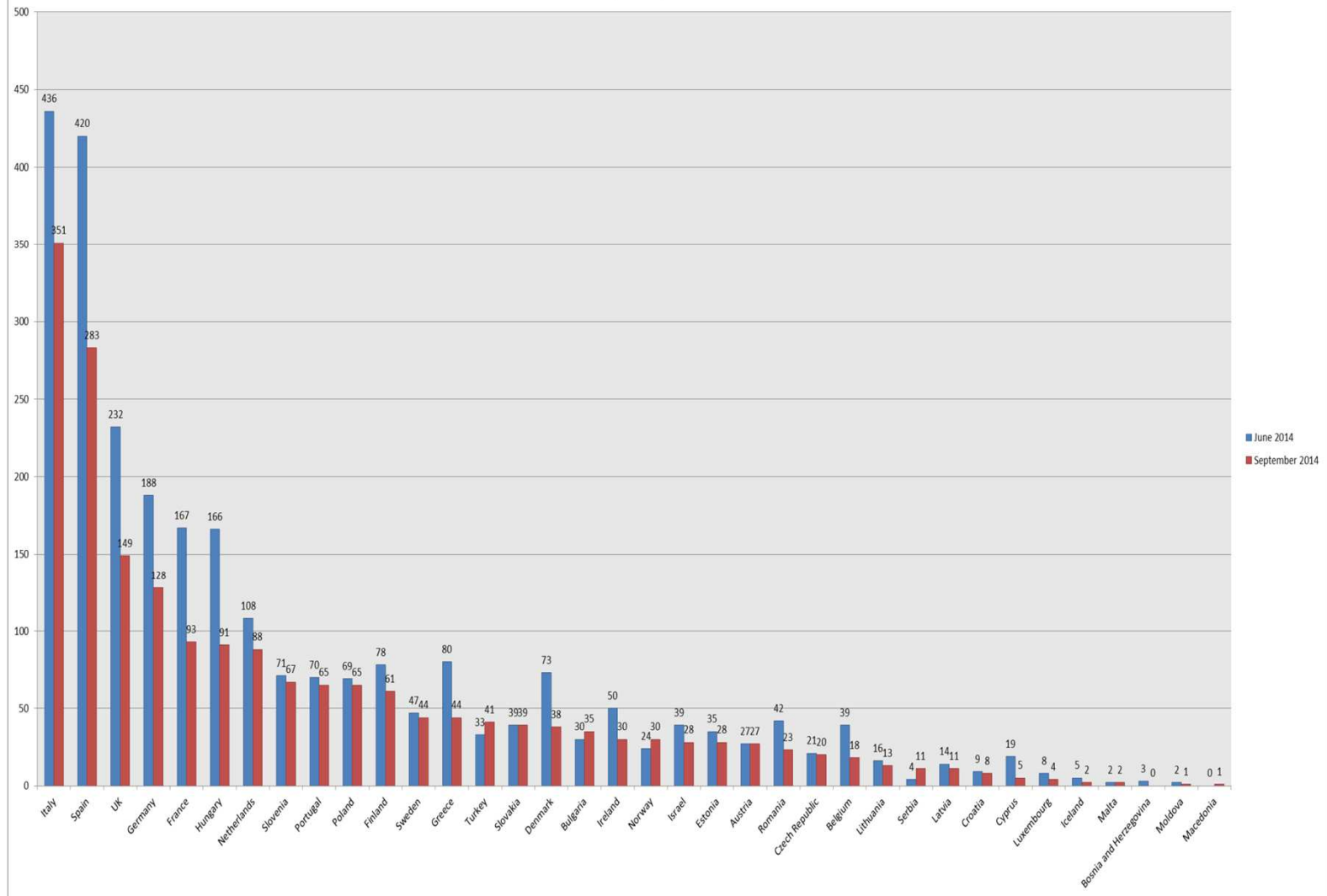
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Horizon 2020 SME Instrument Number of proposals submitted by topic

Updated September 2014



Horizon 2020 SME Instrument
 Number of proposals submitted by country
 Updated September 2014



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Useful links:

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- **Short cut to work programmes, rules for participation, templates for applications etc.:**
http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html
- **Example of application template Phase 1 SME-instrument:**
http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/h2020-call-pt-sme-1_en.pdf
- **Example of application template Phase 2 SME-instrument:**
http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/h2020-call-pt-sme-2_en.pdf
- **Executive Agency for Small and Medium-Sized Enterprises (EASME):**
http://ec.europa.eu/easme/sme_en.htm
- **Danish Agency for Science, Technology and Innovation:**
<http://ufm.dk/forskning-og-innovation/tilskud-til-forskning-og-innovation/typiske-sporgsmal/horizon-2020-typiske-sporgsmal/fag-smv-instrumentet/spoergsmael-og-svar-om-ansoegninger-til-SMV-instrumentet>

Getting started...

Find your relevant topic:

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

Find partners, if needed.

Use your own network or get match-making help from Enterprise Europe Network (EEN)

<http://www.enterprise-europe.dk/>

Use all the help you can get!

www.eusupport.dk



**Thanks for your
attention!**

