

Report Breakout session #2

SMEs as a driver of EU innovation ecosystems: How can we stimulate market-creating innovation through SME funding?

Executive Summary

The second breakout session examining the role of SMEs as a driver of EU innovation ecosystems was moderated by Fernando Moreno CEO of Solutex and SusChem board member, and the results of the session was presented in the afternoon by Cristina Gonzalez, secretary of SusChem Spain and NTP representative on the SusChem board. This session had surveyed participants in a quick live survey on their experiences of EU innovation programmes and participants had also been consulted through a questionnaire prior to the event on barriers to commercialisation of innovation and ways of overcoming them. Although there are several funding instruments available, a majority of session participants had not yet applied for any. However a significant majority of those that had applied, were successful. The most funding success had been from national programmes, followed by Horizon 2020. The top three barriers to innovation were perceived as administrative and regulatory aspects, the time lag between innovation and regulations ‘catching up’, and the time taken to move an invention into a commercial product. Important innovation policy drivers to be emphasised for the future included the development of regional innovation hubs for SMEs, the pilot schemes for the European Innovation Council, such as the SME instrument, Fast track for innovation and newer broader models for the evaluation of projects.

In terms of support for SMEs in FP9, it was felt that there was a need to differentiate between technology and capital intensive SMEs and other kinds of SMEs and there is a need to optimise access to the various PPP initiatives as the resource (time and money) that an individual SME can commit is limited. Reducing the cost of preparing and following up on proposals was also an issue. The concept of innovation hubs should be developed to allow a full range of collaborative models and specific services to SMEs including access to large company’s infrastructures.

There is also a need to allow the necessary time for scaling up and financing of new technologies, which should be encouraged in the new programme and the future development of the European Innovation Council (EIC) should include the current instruments but adjusted to include larger innovating SMEs. Financing for scale up is a particular issue to address.

Session Agenda:

Welcome, introduction of the session - Anne Chloe Devic

Introduction of the speakers and moderator - Fernando Moreno, CEO of Solutex

Presentations

- Gianluca Belotti, Project Manager Officer at IRIS
 - SME instrument
- Hans Keuken, Founder and Managing Director of Process Design Centre
 - Large FP7 European funded project
- Gerhard Maier, CTO and Co-founder of Polymaterials AG
 - National and Regional funding in Germany
- Iryna Sukhotska, Head of Public Affairs and R&D Project Management at Biopolis
 - National funding in Spain

Presentation of survey results and initiation of debate.

Breakout Session Report:

The competitiveness of SMEs relies on their capacity to bridge the “valley of death”. The objectives of the session were:

- To examine which funding instruments SMEs have used through a quick live survey.
- Looking at four different case studies presented by SMEs: and share their experience with different funding instruments.
- Going through the list of barriers and policy drivers extracted from the open consultation performed prior to the event and give additional input from the stakeholders at this session.
- Based on this, establish a list of recommendations for the EC.

A quick live survey was conducted during the first part of the session and some interesting results and remarks came out (see graphs in the annex as well), which were presented after the coffee break in the middle of the session.

The four presentations allowed experiences to be shared on different types of R&I funding instrument.

GianLucca Belluti, from IRIS, presented the experience on the SME instrument, phase 1 and 2. Within various criteria, he highlighted the importance of the business plan, knowledge of the market and choice of partners, demonstration of the actual TRL level when preparing the proposal. And when executing the project, a close contact with the programme officer is key.

Then Hans Keuken from PDC explained how participation in large European projects allowed them to keep up to date and aware of new technological developments and helped them to establish relevant networks and develop further business.

Gerhard Maier from Polymaterials AG, presenting some German national and regional funding, highlighted the drawbacks of the bureaucracy and the too long lead-time between the proposal and the actual start of the project. However, he highlighted a very flexible innovation instrument in Bavaria which shows that the situation has improved recently a great deal.

Iryna Sukhotska from Biopolis also highlighted the simplification of the processes in Spain and the very good level of support brought by the national contact point and the funding office, CDTI.

After the coffee break, Fernando Moreno started his presentation, setting the scene first, by showing data on SMEs in Europe (see in annex): 23 million SMEs provide 2/3rd of the jobs in Europe and generated a value of four trillion Euros. Despite positive data after the recent financial crisis, there are several sectors and member states which still lag behind in the recovery and some current problems that SMEs are facing were presented. The most pressing one being access to the market.

The results of the quick live survey on funding programmes (see annex) show that most SMEs present have not submitted any proposal to the different instruments listed, but the ones who do present a proposal receive funding (a high success rate). This applies also to others (RTOs, large company) but to a less extent than SMEs. In terms of type of instrument, H2020 project, SME instrument and national funding got the best success rates.

Following these results, Mr Moreno showed the results of the open consultation sent prior to the event to a wide number of SME, not only to the ones participating in the event (see graphs in the annex).

The three main barriers identified which hamper commercialisation for an SME are:

The time gap between innovation and regulatory oversight and Guaranties for capital investment (17% each one), followed by Administrative and Regulatory aspects and Long cycles from invention to sale (13% each one). :

General remarks:

- There needs to be a bridge between innovation and policy development. The regulation needs flexibility and should take account of technology developments and associated risks.
- The financial entities do not have any standards for allowing an appropriate assessment of intangible assets.
- Bank guarantees should be adjusted to the intangible assets of a specific SME, instead of personal guarantees or cash.
- Market knowledge and Access, partner search, dissemination of the product/service concept, marketing, production, and regulatory status are the compulsory tasks required to commercialise a new product.
- Necessary time for scaling up a technology, specific to Chemical SMEs can hinder more innovation and initiative. In the chemical industry, a cycle for product development involving new technologies, typically takes 5 to 10 years; Time needed to access and know the market, to develop partnerships, to market the product and finally, last but not least, the production which requires time to implement.
- The administrative burdens and requirements for necessary standards implementation can also be a barrier for commercialisation.

In the second part of the consultation: What are the Policy drivers that would better bridge the ‘valley of death’?

The results have been:

- The Innovation hubs (regional ecosystems for SMEs including RTOs, infrastructures, services, large companies)
- The European Innovation Council pilot including the following instruments : SME instrument, Fast track to innovation, FET Open
- In addition, new and broader models for evaluation of projects
- The innovation principle engaged by the European Commission

General remarks:

- The EC has developed the concept of innovation hubs and they are already the object of calls in Horizon 2020: this should be widened even further, they should provide :
 - Meeting points that provide subject-matter expertise on:
 - Technology trends, knowledge
 - Strategic innovation management
 - Industry-specific insights.
 - A wide variety of services specifically required by start-ups
 - Enable active knowledge transfer between researchers, business experts, industry, government and representatives of academia
 - Financial ecosystems for a wide access.
- The EIC is a new initiative in Horizon 2020 to help improve Europe's performance in breakthrough, market-creating innovation. The EIC is designed and implemented alongside a wider set of initiatives that should seek to improve the regulatory environment and market conditions for innovation.
- Innovation-friendly or “innovation framing” legislation: should provide guidance to ensure that the choice, design and regulatory tools foster innovation, rather than hamper it.
- Regulation has the potential to drive innovation when it is well designed, flexible and regularly updated to reflect market developments. To ensure that the regulatory process becomes more innovation-friendly, the innovation principle could be a guiding principle.

- In the evaluation of projects, European projects are evaluated from a scientific point of view; in addition, calls should better reflect SMEs priority topics.
- The business focus might not be highly valued in the project evaluations, compared to the scientific value of the proposal.

Recommendations to the EC

After a very good debate, it was decided to recommend to the European Commission the following innovation support for SMEs:

- Differentiate between technology and capital intensive SMEs from other kinds of SMEs.
- Resource Optimisation (time and money) of Memberships to various initiatives (PPPs, ETPs).
- Reduce cost associated with the preparation and follow-up of proposals.
- Develop further the concept of innovation hubs and allow a full range of collaborative models and specific services for SMEs including access to large companies infrastructures (Eco-partnerships).
- Allow the necessary time for scaling up and financing of new technologies, encouraging more innovation and initiative in the new Framework programme.
- In the future, the European Innovation Council should develop and adjust its instruments so they are appropriate not only to start-ups and unicorns, but also for larger innovating SMEs.

Appendix: graphs of the quick live survey, data on SMEs in Europe and results of the consultation

Quick live survey questionnaire:



Session III: Shaping funding instruments to accelerate innovation and competitiveness in Europe

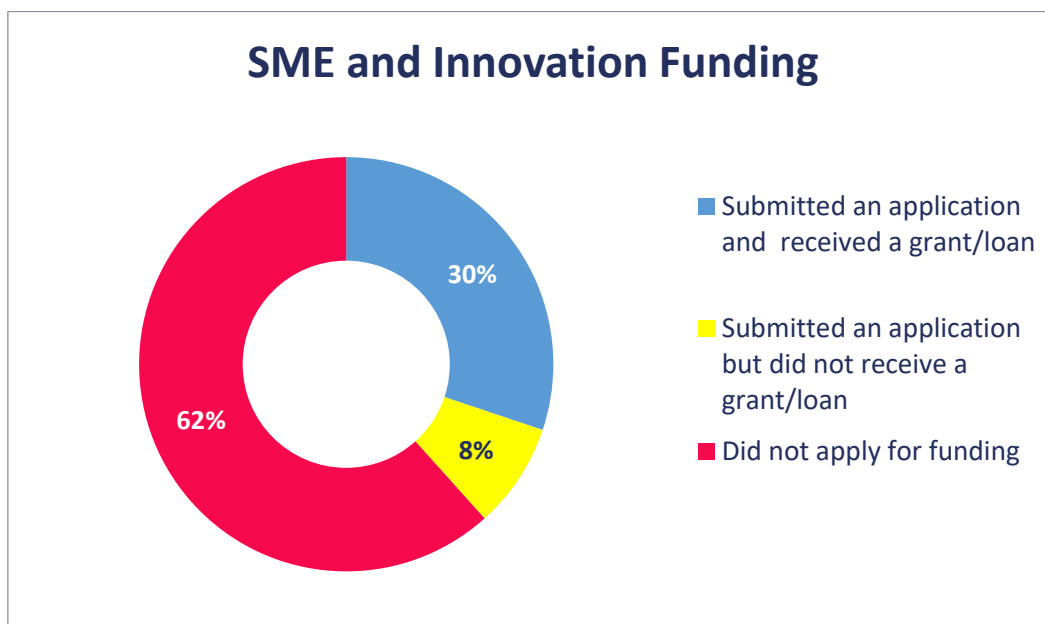
You are: SME ☐ Large company ☐ Other ☐

To fill the box below, please select the color according to your answer:

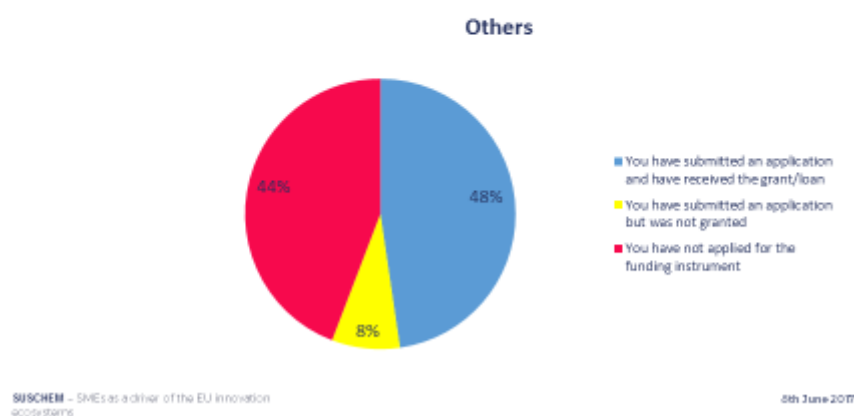
- You have submitted an application and have received the grant/loan
- You have submitted an application but was not granted
- You have not applied for the funding instrument

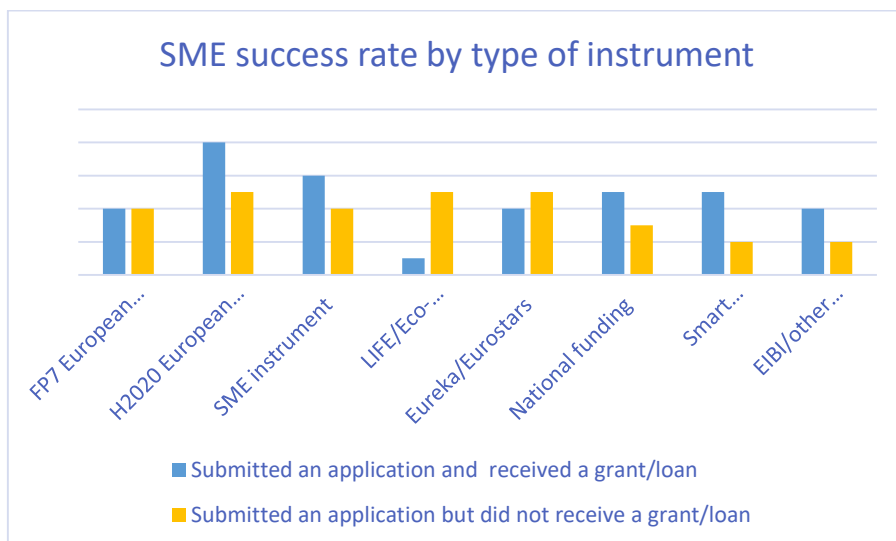
FP7 European Project	
H2020 European Project	
SME Instrument	
LIFE/Eco-Innovation	
Eureka/Eurostars	
National funding	
Smart specialization project	
BEI/other innovation loans	

Results of the quick live survey:



2. Public financing





Data on SMEs in Europe:



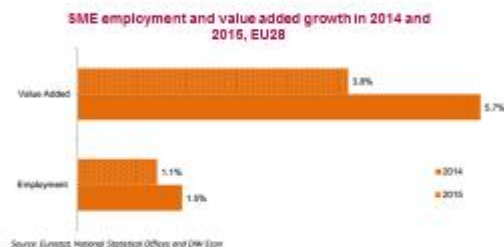
1. Situation of SMEs in Europe

- > In 2015, just under **23 million SMEs** generated **€3.9 trillion in value added** and employed **90 million people**
- > SMEs provide **85% of all new jobs**

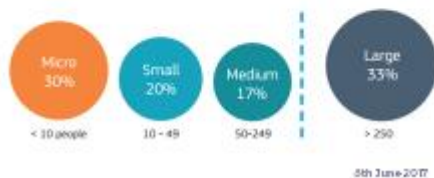
SMEs EMPLOY 2 OUT OF EVERY 3 EMPLOYEES AND PRODUCE 57 CENTS OF EVERY EURO OF VALUE ADDED¹



SUSCHEM – SMEs at a driver of the EU innovation ecosystem



EMPLOYMENT SHARE PER SIZE CLASS



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1. Situation of SMEs in Europe

- Value added growth **3.8%** in 2014 and **5.7%** in 2015
- SME employment growth **1.1%** in 2014 and **1.5%** in 2015

GRADE OF SME RECOVERY AFTER THE CRISIS
BY EU MEMBER STATE

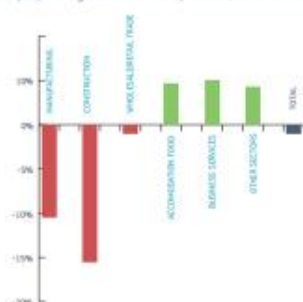


■ Positive value added and employment rate in SMEs 2008-2015
■ Positive value added but negative employment rate in SMEs 2008-2015
■ Negative value added and negative employment rate in SMEs 2008-2015
■ Due to structural break, relevant period for the Slovak Republic is 2010-2015

	2014 vs. 2013	2008 vs. 2015
Value added €	+5.7%	+8.6% or 336 billion €
Number of enterprises	+1.6%	+3.3% or 673 000 enterprises
Employment	+1.5%	+2.2% or 1 150 000 jobs

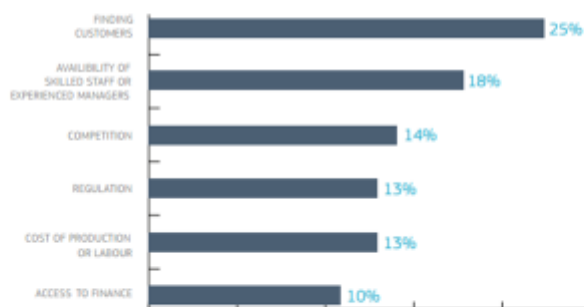
SMEs in the non-manufacturing sector, standardized to per capita value

Employment growth in SMEs by sector (2008 = 2015)



1. Situation of SMEs in Europe

EU-28 SMEs' most pressing problems in 2015



Source: 2015 Safe Survey

SUSCHEM – SMEs as a driver of the EU innovation ecosystems

8th June 2017

Questionnaire for the open consultation:

Your name

Your organization (SME, start up, RTO, large industry or others):

This session will look how to contribute to building innovation management capacity for Small and Medium Enterprises. How can companies manage innovation processes from the generation of the idea to its profitability on the market?

In order to get prepared for the discussion, we are looking into exploring, prior to the celebration of the event, what are the barriers which prevents an SME to bridge the valley of death and reach the market in good conditions (like time, economics...). This is why we are kindly asking you to fill in this questionnaire:

1. What are the barriers which hamper the commercialization (choose 3 replies max , you can comment further in the box : others) :

- Administrative and Regulatory aspects (like ISO 166002)
- Temporal gap between innovation and regulatory
- Too long cycle from invention to product for sale
- Cost of Market access
- Difficulty of working with big industries
- IP (time or cost)
- Adoption of a new technology by customers
- Cost of pre-sales activities
- Availability of selected skills/talent
- Guaranties for capital investment

2. What policies would favour the innovation in SMEs (choose three replies max, you can comment further in the box: others)?

- Innovation hubs (regional ecosystems for SMEs including RTOs, infrastructures, services, large companies)
- European Innovation Council pilot (<http://ec.europa.eu/eic>)
 - SME instrument
 - Fast track to innovation
 - FET Open
 - Prizes
- New and wider models for evaluation of projects
- Support to IP and knowledge assessment and strategy
- Education policies (for example, innovation in the schools, society evolution to higher innovation awareness)

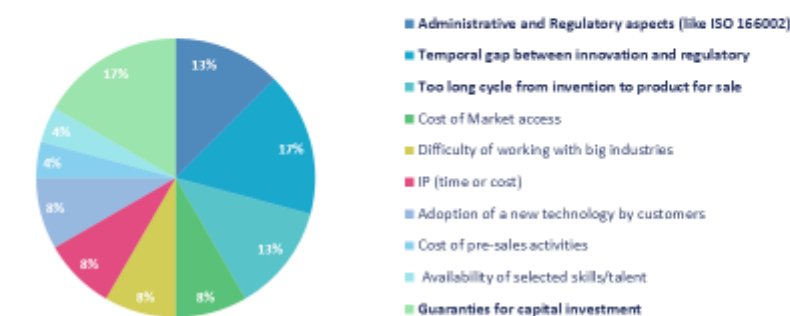
- Innovation principle
(Proof, fit for purpose, research, and innovation-friendly legislation also when dealing with existing legislation in the framework of the REFIT programme: how regulation can be made more innovation-friendly).
- Better alignment between EU and Member States policies
- Public procurement (including the whole product's value chain)
- Other types of instruments/policies (Box to fill in)

Results of the open consultation:



3. Barriers that hamper the commercialization

Main barriers to the commercialization
(questionnaire to SMEs, 29th May 2017)



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