ORGALIME

Position Paper

Brussels, 28 June 2016

Orgalime Comments on the Horizon 2020 Consultation (Industrial Technologies)

Please consider the following questions, citing any available evidence such as foresight and other assessments of research and innovation trends and market opportunities: Please consider the four areas of NMBP, depending on your expertise: Nanotechnologies, Advanced Materials, Biotechnology, and Advanced Manufacturing and Processing. Please include any links to the societal challenges addressed in Horizon 2020, which you consider important. The first four of these questions are common to all parts of Horizon 2020.

1) What are the challenges in the field concerned that require action under the Work Programme 2018-2020?
And would they require an integrated approach across the societal challenges and leadership in enabling and industrial technologies?
Please help us establish strategic approaches with your answers to this question. The Work Programme topics will be developed from detailed industrial roadmaps in nine areas.

The Industrial Leadership pillar of Horizon 2020 (in particular the NMBP programme) has to keep its focus on supporting European industry to increase its global competitiveness. Only through this, industrial technologies can also help tackle societal challenges. An "integrated approach" should not become a goal per se, without a strong industrial base in Europe, we will not be able to solve the societal challenges.

To be competitive today companies must basically focus on developing their business, technologies and science base and at the same time find environmental and social sustainability. Therefore, the NMBP programme has to continue to focus on building competitiveness and not (solely) on horizontal matters.

Orgalime considers the three pillars structure of Horizon 2020 as appropriate and thinks it should remain that way and strongly opposes any merger of LEIT and Societal Challenges. Keeping LEIT independent and even reinforcing it in the coming years will be a strong message to the global market players, showing a strategic ambition for Europe. The European Commission should support European companies in the fierce global competition.

www.orgalime.org

ORGALIME aisbl | Diamant Building | Boulevard A Reyers 80 | B1030 | Brussels | Belgium
Tel: +32 2 706 82 35 | Fax: +32 2 706 82 50 | e-mail: secretariat@orgalime.org
Ass. Intern. A.R. 12.7.74 | VAT BE 0414 341 438

Orgalime recommends that within LEIT, NMBP should reinforce manufacturing related call topics. Moreover, Materials and Nanotechnology - related topics should support the challenges of the manufacturing industries (pure “Nano”, “Materials” or “Chemicals” related topics have been sufficiently covered in the call topics from in the past years).

Digitalisation of industry is providing outstanding opportunities for Europe to build up its manufacturing industry competitiveness. Therefore multiple fields of innovation which embed microelectronics and communication technologies in the manufacturing process should also be addressed by NMPB innovation actions.

Today, European engineering companies are mainly attracted by Factories of the Future PPP call topics. It would be desirable if also outside the FoF PPP, there would be more opportunities for engineering companies in the overall NMPB programme.

2) What is the output / impact that could be foreseen? Which innovation aspects could reach market deployment within 5-7 years?
How could this benefit industrial leadership and the priorities of the Commission, notably the Digital Single Market and the Energy Union?

Orgalime anticipates the expected impact of projects to be substantial if the focus of NMBP is put on competitiveness and on supporting industry in the digital transformation.

Orgalime underlines that innovative solutions often take time to reach the market as the conditions may not be right at that particular moment for them to thrive. For example, it took decades for laser to be introduced in manufacturing. Innovation deriving from research takes time but has clear long-time benefits.

Bringing innovation to the market and delivering impact is not a linear process where companies go from A to B with a secure outcome. Innovation is a risky business, and this has to be taken into account when predicting impact.

Nevertheless, Orgalime understands and agrees that public investments need to be justified. Therefore, we see a need to increase the understanding among policymakers and civil servants deciding upon and assessing investments in the industrial environment. This will help manage uncertainty better and contribute to deliver impact.

Additionally we recommend civil servants to bear in mind competitiveness at all time when developing call topics. This will contribute to drafting straightforward calls that can be measured more easily than awareness campaign type of projects.

3) Which gaps (science and technology, innovation, markets, policy) and potential game changers, including the role of the public sector in accelerating changes, need to be taken into account?

Orgalime believes that the European Commission should ensure a political framework to favour excellence and innovation, taking all facets of the research and innovation ecosystem into account.

ORGALIME aisbl | Diamant Building | Boulevard A Reyers 80 | B1030 | Brussels | Belgium
Tel: +32 2 706 82 35 | Fax: +32 2 706 82 50 | e-mail: secretariat@orgalime.org
Ass. Intern. A.R. 12.7.74 | VAT BE 0414 341 438

When talking about gaps and game changers, Orgalime has long stressed that funding alone is not the answer to stimulating innovation in the EU: the whole regulatory framework plays a major role in determining whether or not companies will invest in innovation in the EU or elsewhere.

4**) Which areas could benefit from integration of horizontal aspects such as social sciences and humanities, responsible research and innovation, gender aspects, and climate and sustainable development?**

These aspects form elements needed to reach industrial competitiveness, they are inherent to industrial leadership. However they need to make sense in the context of the NMBP calls and should not be unilaterally requested for the sake of being there.

Nevertheless, one horizontal aspect that should be covered is data security which remains a key factor for the adoption of new digitised solutions by manufacturing companies and the wider economy.

The focus of NMPB should remain competitiveness. To be competitive in today's reality, companies need to take the above horizontal aspects into account. Nevertheless, it should not become mandatory to include them as separate work packages. This will only create artificial activities and add on to the complexity of EU research and innovation projects.

5) **How can the NMBP part address as effectively as possible the emerging supply chains, notably in the context of the 4th industrial revolution, in which the fusion of technologies is blurring the lines between the physical and digital spheres?**

Orgalime believes that European engineering companies should receive support for undergoing the modernisation (including digitalisation) of their manufacturing processes and business development to better respond to the customer's demands. Companies are today interested in integrating the digital dimension as a part of their business concept and business development, covering not only the physical environment on the shop floor but also the creation of new business models and the integration of services. Up to now, the NMBP programme addressed, at least partly, the "digital" dimension through the Factories of the Future NMP-call topics. Orgalime would welcome if more areas of the NMPB programme would integrate the digital dimension in their strategic work (however without overlapping with but rather complementing the call topics covered by DG Connect). A strategic, long term focus on supporting companies to embrace the digital dimension will help create the right conditions and opportunities for innovation and technological break-through for our engineering industries in Europe.

Contact persons:
Željko Pazin, Director Trade, Legal, R&D&I
Rozenn Maréchal, Adviser
Email: first name.second name @orgalime.org