Accelerating technology transfer with joint European action to address SMEs specific needs

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Summary

Smartization is in progress and the business opportunity represents a 54B€ market for hardware in IoT alone. This is a huge opportunity for European SME but also a challenge since the time to market is shorter and shorter and a lot of technologies that will make this market possible are still in the lab. The European Commission has identified this strong need for the technology transfer acceleration and has invested 25M€ among eleven countries in Innovation Actions for Smart Systems.

The gateone project is an innovation action from the Smart Anything Everywhere initiative which aims to initiate the relationship between Research and Technology Organisations (RTO) and SMEs. In the next 2 years, the gateone-project will invest in 50 demonstrators with a clear business case to reduce the risk and prepare the roadmap to productization. The action started in January 2015 and 15 demonstrators are currently under discussion.

Motivation and results

The objective of the gateone-project is to increase the adoption of smart systems in European SMEs to support their differentiation and competitiveness. In the frame of the COWIN support action for commercial exploitation of FP6 and FP7 research project results (www.cowin4u.eu), it was identified that one of the main hurdles to this adoption is the difficulty for SMEs to assess the innovation risk. This risk is of various natures, the technical risk of transfer, the time needed for product development and of course the market maturity. Reducing such risk requires not only a technical maturity but also the assessment of a business case. One of the lessons learned in COWIN is that in order to generate an opportunity for technology transfer, 4 parameters are required: IP, manufacturability, market readiness and the possibility for the future adopter to evaluate the technology.

The maturity of a technology is measured in terms of Technology Readiness Levels (TRL) but this technical reference does not take into account the market readiness. The industry is more familiar with the New Product Introduction process (NPI) where the future product goes through various gates. At each gate, the technical maturity and business case are assessed and a go/no go decision is taken. In the gate zero, there is a product idea. When the process reaches the gate one, a demonstrator and a business case are produced. These are the minimum inputs required to take the decision to launch a product development.

In adopting the NPI process, the gateone-project changes the relationship between RTO and SMEs. Indeed, the transfer is usually envisaged at the gate zero. Our action is to work together with the SMEs from the gate zero to the "gateone".

The consortium provides to European SMEs more than 200 innovative product ideas that can find applications in more than 20 different vertical businesses. 4 months after its launch, this action has already initiated collaborations with 15 SMEs to evaluate technology towards further adoption. Concrete illustrations of gateone-project process and results will be given during the presentation.

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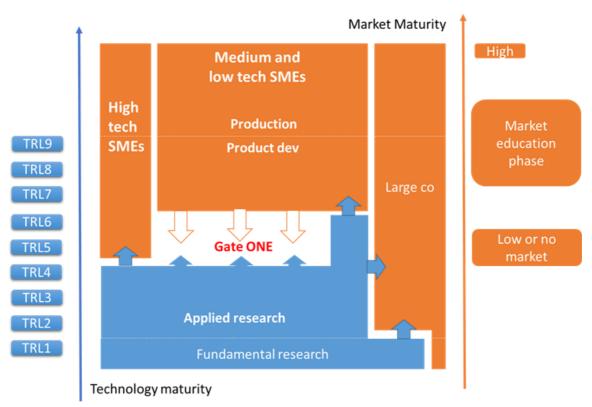


Figure 1: Transition between technology readiness level and market readiness by the gateone-project to accelerate technology transfer.