

## **European Robotics Initiatives: Perspectives and Opportunities for Serbia**

Uwe L. Haass

Within the last ten years, we have seen an enormous expansion of European robotics moving from manufacturing and automation into many other industrial and professional service sectors, mostly in agriculture, health, logistics, mining, and public services. Improved technologies like sensor-based collaboration with humans and growing autonomy on one side, and, on the other side, steadily decreasing investment costs have made this possible – together with a European mix of first-class research, the ability for interdisciplinary work, and public funding from the European Commission. In order to improve the transfer from laboratories to applications, the Commission engaged in 2013 into the Public Private Partnership “SPARC” with the European robotics association euRobotics. Under the umbrella of euRobotics, more than hundred experts participate in over 20 Topic Groups in shaping the European Roadmap for Robotics which served the European Commission as a strategy for the robotics programme under Horizon2020.

So far there is evidence that H2020 has stimulated a very active European robotics community with substantial growth rates observed by both users and producers of robots. For the remaining years under H2020, the strategy of the Commission focusses much more on (i) the integration of robotics into the DEI initiative (Digitizing European Industry), and (ii) regional Digital Innovation Hubs (DIH) as a consequence of the very unbalanced geographical situation of robotics in Europe. DIHs are to stimulate innovation, entrepreneurship, the creation of jobs in regions which have the potential, but suffer from non-technical barriers to evolve. Robotics is seen as having high potentials for the regional development to the benefit of its economy and society.

This talk will present an overview on the recent developments of robotics in Europe and present the strategies currently discussed in the Commission which may have high potentials for Serbia.  
consultant.