

Applicant's program: Prof. Dr.-Ing. Alice Kirchheim

Robotics in Germany is undergoing a transformation. Industrial robotics has long been shaped by stationary systems in automotive and manufacturing. We are now seeing a shift towards mobile robotics, from Autonomous Mobile Robots (AMRs) to increasingly capable humanoid robots. This transition spans numerous domains, with logistics being one of the most prominent. A recent study by the International Federation of Robotics shows that transport represents the largest application domain in service robotics, accounting for 52 %. This transformation demands a coordinated, strategic response.

As Director of Fraunhofer IML, and backed by the Fraunhofer-Gesellschaft as Germany's largest organization for applied research and technology transfer, I will contribute my network, experience, and commitment to strengthening the DGR as Germany's central robotics platform.. At IML, we regard robotics as a strategic field of action and successfully advance our own robotics developments, such as LoadRunner and evoBOT. We are involved in two proposal submissions for the Robo Hub initiative. Through strong political and industrial connections, the Fraunhofer-Gesellschaft will strengthen the DGR's visibility and serve as a multiplier and transfer enabler. I will act as a multiplier for the DGR, leveraging logistics as a cross-cutting domain to connect diverse application domains and ensure the DGR's visible presence at numerous events.

My membership in the Robotics Institute Germany and the Lamarr Institute for Artificial Intelligence, together with my roles on the Executive Boards of the German Logistics Association and the Open Logistics Foundation e. V., provide expertise and valuable networks across all relevant fields. My profile combines industrial and research experience with a strong understanding of the needs and perspectives of SMEs. Furthermore, Dortmund's central location in Germany provides an excellent basis for nationwide networking, coordination, and technology transfer.

I will actively help shape the implementation of the measures set out in this proposal, as well as the development of the DGR's strategy and roadmap. I will steer operational work in close alignment with this strategy, ensuring that strategic objectives are translated into effective implementation.

My vision for the DGR is to democratize multipurpose robotics across Europe's mid-market through "Robotics for All" While large corporations invest billions in industrial pilots, SMEs face high barriers, and Germany's excellent scientific robotics expertise risks being overtaken by the speed with which Chinese and US competitors bring solutions to market. Yet multipurpose robots can address Europe's skilled labor shortage and strengthen technological sovereignty, but only if they are made accessible to all.

As DGR, we will strive for "Robotics for All" through three initiatives that address stakeholders from industry, research, politics and society: (1) facilitating collaboration to create open, manufacturer-independent standards; (2) creating opportunities and spaces of encounter; and (3) sharing knowledge in a targeted manner.

The result is a DGR that serves as an independent hub, ensuring that multipurpose robotics becomes an accessible tool for everyone. Whoever democratizes this technology shapes tomorrow's solutions. This is how the DGR secures Europe's strategic position.