

Robotics PPP: The next generation of intelligent robots to keep EU manufacturing competitive

- Developing the next generation of intelligent robots to keep European manufacturing competitive
- Increasing the world market share of European robotics manufacturers to 35%
- Entering new markets in agriculture, healthcare, transport, security and utilities



What is the challenge?

Robotics is a key enabling industry for manufacturing. Without a strong robotics industry, Europe would quite simply not be able to maintain or expand its current level of manufacturing. To maintain a strong base in manufacturing, it is thus imperative to develop the next generation of industrial robots which can work in close proximity to humans, are easy to program and can also be adapted to the needs of small businesses (SMEs). Furthermore, future growth is expected in new domains of service robotics such as agriculture or healthcare. If Europe wants to seize these opportunities, it has to move into these domains now and make the necessary investment.

What is the PPP in robotics about?

The Public Private Partnership in robotics (PPP) is the teaming up of the robotics industry, research, academia and the European Commission to launch a joint research, development and innovation programme in order to strengthen the competitive position of European robotics.

The basic aim of the PPP in robotics is to boost robotics research, development and innovation in Europe, by better connecting academia and industry. To do this, the EC will translate the research requirements of industry and academia into concrete work programmes and calls for proposals and organise a strategic dialogue with them on these matters. Doing so will mean that the research results of calls for proposals will be more relevant for these stakeholders.

What results and benefits do we expect?

The PPP should help Europe's robotics industry gain in competitiveness, increase its world market share and improve its innovation capability. It should allow for the creation of new robotics solutions that will contribute to more growth and jobs in Europe, an increased role for robots in improving people's quality of life. It should also help academic research labs strengthen their market orientation so that their achievements and discoveries can be turned into concrete solutions for societal and industrial needs.

What will the new total budget be?

The total budget devoted to the PPP in robotics is around €700million in Horizon 2020. This is expected to trigger an additional private investment in the ratio of 3:1 (i.e. around €2bn).

How will it be managed or run?

The PPP will be jointly run by the European Commission (representing the public side) and <u>euRobotics aisbl</u>, the association of the European robotics community which includes robotics manufacturers, component manufacturers, systems integrators, end users, trade fair organisers, venture capitalists, research institutes, universities (roughly 150 members). The public and private side will meet regularly in a so-called Partnership Board where the joint strategy will be discussed and decided.

Useful links

PPP in robotics in the Digital Agenda euRobotics

Success Story

This will not be the first time EU robotics research and industry join forces generating successful results. ECHORD (European Clearing House for Open Robotics Development) is an EU-funded project that started in 2009 with the aim to strengthen cooperation between academic research and industry in European robotics. The project brings together 53 universities and 80 industrial companies (including many SMEs and start-ups) to put the EU robotics industry in a global leadership position by improving the technology transfer between academia and industry. ECHORD's more than 50 experiments include robotic assistants in surgery (like a semi-autonomous two-arm assistant, which can take over the tiring lever holding during hip surgery); automation solutions for increasing European industry's competitiveness (like this experiment applying robotic technologies in the packaging process of the high value shoe production); improved solutions for monitoring the environment (like this self-navigating boat teaming up with an unmanned aerial vehicle for better environmental monitoring in riverine environments in search for pollution).

More information: ECHORD project

