



Europe's €2.8bn robotics initiative is 'world's largest'

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The European Commission has joined forces with the robot industry and researchers across Europe to launch what they claim is the world's largest-ever programme of civilian research and innovation in robotics. They predict that the €2.8bn (\$3.8bn) Sparc programme, spread over seven years, will create more than 240,000 jobs in Europe and to raise EU's share of the global robotics market from 35% at present to 42% by 2020.

The global market is currently worth €22bn (\$30bn), but is expected to grow to more than €60bn (\$82bn) by 2020. A recent study by McKinsey has estimated that the use of advanced robotics in manufacturing, healthcare and services could have an annual economic impact worth \$1.7–4.5 trillion worldwide by 2025.

The aim of the Sparc initiative is to maintain and extend Europe's leading position in this strategic area. The EC is investing €700m (\$950m) in the programme under its new Horizon 2020 research and innovation programme, while European industry will invest a further €2.1bn (\$2.9bn). The work will cover not only industrial robots, but also emerging application areas such as agriculture, health, transport, civil security and domestic uses.

The programme was announced at the Automatica trade show in Germany earlier this month by European Commission vice-president Neelie Kroes who warned that Europe's leadership in robotics was at stake. "Being a leader doesn't guarantee that you will keep that position," she said. "You have to work like hell."

On the private side of the partnership is an organisation called euRobotics, which represents more than 180 European companies, universities and research institutions, ranging from traditional robotics manufacturers to producers of agricultural machinery. Its members are developing a "roadmap" for robotics in Europe which will be turned into concrete work programmes.

"Sparc will ensure the competitiveness of European robotics industries," predicts euRobotics president, Bernd Liepert. "Robot-based automation solutions are essential to overcome today's most pressing societal challenges – from demographic change to mobility demands and sustainable production."

According to Liepert, who is also chief technology officer for the robot-maker Kuka, we are at the dawn of a new era where robots will collaborate with humans. "Manufacturing will not be possible without them," he said, adding that robots are acquiring new skills such as the ability to handle soft materials such as cloth and leather.



European Commissioner Neelie Kroes launches the Sparc initiative at the Automatica trade fair in Munich
Photo: Messe München

He pointed out that public interest in robotics is growing with the recent investments in robotics and autonomous vehicles by Google and Amazon raising awareness of these technologies.

"The robotics revolution is happening now. We should not follow it, but lead it," Kroes declared. "Robots can improve our economy, our lives, our jobs. Robots are not cutting humans out of the equation: they are partners for a better future."

But she conceded that Europe's citizens still need to be persuaded that robots create, rather than destroy human jobs. A recent poll has suggested that 70% of Europeans believe that robots are "stealing" jobs.

Sparc is open to all European companies and research institutions. The first call for proposals ended in April 2014 and the next call will be published in October 2014 with a deadline expected for April 2015.