

Neelie KROES

Vice-President of the European Commission responsible for the Digital Agenda

Lighting a SPARC under our competitive economy

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Welcome, all of you. It's a pleasure to open Automatica 2014 today. This is the place to be for the latest in robotics innovation.

The uses of robots are varied and growing.

In agriculture, they can do what people are increasingly unwilling to do –from milking cows to picking crops.

In industry, they can boost our competitiveness. And remember that manufacturing is still one fifth of our output – and four fifths of private research spend. It employs 34 million people in Europe – but they face tough competition: other parts of the world can offer cheap labour and cheaper goods. We need to stay competitive.

And it's no longer just about industrial robots. This event also rightly focuses on service robotics – services from domestic cleaning, to company logistics.

Performing surgery, or helping the elderly stay active, independent, empowered.

For example, 94-year-old Italian writer Lea Ralli, "Nonna Lea", has lived with a robot for several months as part of a research project. The robot, and the link to helpers it provides, makes her feel safer and more confident. This is a great example how robots can help us keep our dignity and independence as we age.

And beyond that: it's about all kinds of automated and autonomous systems performing all kinds of functions. From driverless cars - to unmanned delivery.

Here today there are many great examples of what robots can do for us.

They are fast, precise, powerful. Doing the tasks that humans find too difficult, too dangerous, or just too dull.

They make my robot vacuum cleaner seem positively primitive!

And I know this is just a sample of what's out there. It's a growing global market, worth over 20 billion euros in 2011. And Europe holds 35% of that – a great figure! In some sectors, like professional service robots, it's as high as 63%.

European leadership here is literally worth billions to our economy.

Other parts of the world are taking this seriously. The US just launched their National Robotics Initiative; South Korea and Japan are both investing heavily.

So I have three things to ask of you today.

First, when people think of robots, they worry about the impact.

What it means for us as humans, and for us as society.

It is no longer just about machines that are better, faster, cheaper. There is the prospect of every greater integration. Robots that help with everything we do; devices that you wear; even implants inside the body. Of course those raise issues – about ethics, about privacy, about our humanity and interaction.

Meanwhile, 70% of EU citizens believe that robots steal people's jobs.

None of these worries mean that we should turn our backs on innovation.

But equally - we cannot dismiss these concerns; we need to take them seriously. They are legitimate.

I know that robots can empower people, boost our competitiveness, and create jobs. And many studies agree with me. For example – showing that each industrial robot actually supports 3.6 jobs. That robots will directly and indirectly create 2 million jobs over the next 8 years. And so on.

Yet, even with an overall positive impact on jobs, there will be different short and long term implications, and different impacts in different areas. With 25 million out of work, that is a legitimate cause for concern.

We need a stronger evidence base to show the case, confront these issues, clear up the uncertainty and mistrust. Let's understand the concerns, and address them.

We can also raise awareness of the benefits. Building on ideas like European Robotics week – but going further. If we don't - it will make your life a lot harder – and our economic growth too.

Here's my second request for you today. As robots create jobs – we need the people to fill them. Yet Europe does not have nearly enough people with the right ICT skills. Soon we could face a shortage of nearly one million skilled workers.

That's a problem for politicians. It is a problem for you, an industry in search of quality colleagues. It is a problem for our competitiveness. But most of all: it is a real let down for our people, many of whom are looking for work but unable to get the right skills.

If we all suffer from this problem – we can also all provide the solution. Acting alone, none of us can fix it. But working together, we can make a difference.

Under our grand coalition for digital jobs, dozens of organisations have made pledges – industry, academia, training organisations, the public sector, the voluntary sector, and more. For what they can do: new programmes, new platforms, new partnerships, to help us plug the skills gap. I hope many of you will be pledging too.

Alongside that human capital – our continent badly needs physical capital too: broadband networks. New innovations increasingly depend on connectivity – our competitiveness depends on it too. Services like the Internet of Things will require first-class, high-speed, seamless broadband everywhere.

Machine to machine communications will not take off in a world where they have to pay roaming charges, or suffer separate spectrum systems in each country.

That is why I am fighting for a telecoms single market for our connected continent – I hope you can fight along with me. Let's show national governments that European innovation relies on quality networks.

My third request is this: how can we work together? How can we invest in the future?

For many years the EU has shown its commitment to robotics.

And our investment is delivering. For example, our "SMERobotics" project is delivering the next generation of industrial robots - more flexible, more intuitive to programme, safer to work with. And you can see that on display today.

In so many areas, we work best when we work together. Work together as Europe. Work together between private and public sectors.

Robotics is no exception.

And for many years we have been working productively with the robotics industry.

Today, with the launch of a new Public Private Partnership, we formalise that and take it forward.

We can align support and funding, share ideas, sing from a common hymn sheet. With industry working with academia. With those who use robots involved right from the start, helping define the priorities for research. It's the best way to safeguard continuing leadership for our continent.

The EU has already committed 700 million euros for robotics research in our next funding programme. And the industry has agreed to match that three to one. With over 200 members expected, together employing over 12,000 researchers and developers. That would make it the largest civilian robotics research and development programme in the world. Something which will all together create 75,000 new qualified jobs in service robotics, and 140,000 new jobs in wider service industries, and a boost of €80 billion to GDP.

That's worth having!

So my final request for you is – let's deliver this promise. Let's make this work. Let's commit together and implement together.

Last December, I was delighted to sign the contract that put this partnership in motion. Today we officially launch it.

It's called SPARC – and that's a very appropriate name. A spark lights a flame – and today we can light a flame to keep our economy burning and full of energy.



THE PARTNERSHIP FOR ROBOTICS IN EUROPE



Funding



euRobotics aisbl 180 members



Research centres **Universities** **Industries** **SMEs**

Global robotics market




Did you know?

The robots sent to Fukushima are German.

Important application areas

<p>Manufacturing & industry assembling cars, moving palettes & other goods</p>		<p>Security inspection of pressure vessels & storage tanks used in oil, gas & petrochemical industry; rescue missions</p>	
<p>Healthcare minimal-invasive surgery</p>		<p>Environment cleaning waste, water and air</p>	
<p>Home care assisting elderly & disabled people</p>		<p>Transport autonomous vehicles such as cars & drones</p>	
<p>Agriculture pruning, weeding, spraying, monitoring & milking</p>		<p>Entertainment cinema & educational games</p>	