

Digital Single Market

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Innovation in nanoelectronics is based on a long tradition of cooperation and competition

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The unparalleled rate of innovation in nanoelectronics is based on a long tradition of cooperation and competition, involving the whole ecosystem, large, medium sized and small companies, institutional and academic research.

On 27th and 28th November I took part in the [European Nanoelectronics Forum](#) [1], a very stimulating event jointly organised by the European Commission, [CATRENE](#) [2] and [ENIAC](#) [3].

The [agenda](#) [4] this year was of particular interest as, building on the strong commitment of industry, Member States and the European Union, new strategies and programmes are launched in nanoelectronics,

First, I was very impressed by the exchange of new and thought-provoking ideas during panel discussions. The main concepts centred on the topic of “Building bridges for synergy in European Innovation”. This allowed me and the other members of the panel to share opinions, examples, challenges, lessons learnt from the past and recommendations for the future. We had fruitful discussions on the contributions of nanoelectronics to other industries like transportation, energy generation and distribution, information and communication, entertainment, computing – including mobile computing, health care, security etc. We debated on Europe's strength and where should it invest more. Among other questions were: How do the commercial companies interact with the University and institutional research? What is the role of individual investigators, industrial research labs, collaborative research programmes? Are there specific conditions for collaborative projects to be effective? What are the relations between different disciplines like materials, equipment, design automation, intellectual property blocks, process technology, system and circuit design, test, packaging, reliability and quality assurance? What should/could be improved in strengthening all actors in the ecosystem?

Simple questions, complex answers...unfortunately there is no time and space here to detail them all. One of the conclusions nevertheless was that the unparalleled rate of innovation in nanoelectronics is

based on a long tradition of cooperation and competition, involving the whole ecosystem, large, medium sized and small companies, institutional and academic research.

Secondly, I had the opportunity to present the [EU strategy on Electronics](#) [5] and where do we stand with its implementation. A healthy electronics sector is an essential part of the European economy. Therefore, as in other strategic fields such as aeronautics or space, Europe has agreed an ambitious industrial strategy for micro- and nanoelectronics. Electronics support innovation and competitiveness in all economic sectors. Cars, planes, trains, medical and health equipment, home appliances, energy networks and security systems will all benefit from advanced European capabilities and capacities to design and manufacture state of the art electronic components and systems. As part of the strategy we have put forward [ECSEL](#) [6]: a €5 billion public-private partnership between industry, the Member States and the EU, due to be up and running next year. Implementing the strategy concerns most if not all industrial players in Europe (and also, hopefully, some who are not yet active here). And it will ultimately only succeed with their full engagement.

Thirdly, I was glad to see great [nanoelectronics research projects exhibitions](#) [7], to talk with project partners and to visit the impressive stands allowing visitors to get a grasp of latest research and technology developments in the field. Up to [18 FP7 projects](#) [8] presented posters or demos to showcase achievements to an audience of more than 300 participants.

Last but not least, I would like to congratulate the organisers for their professionalism and for providing such a good mix of people and technology.

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[1] <http://www.nanoelectronicsforum.org/>

[2] <http://www.catrene.org/index.php>

[3] <http://www.eniac.eu/>

[4] <http://www.eniac.eu/web/forum2013/programme.php>

[5] <http://ec.europa.eu/digital-single-market/en/electronics-strategy-europe>

[6] <https://ec.europa.eu/digital-single-market/en/time-ecsel>

[7] <http://www.eniac.eu/web/forum2013/exhibitors.php>

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