



Re: Contribution to the public consultation on the future EU 2020 strategy.

The European Technology Platform Nanoelectronics, represented by AENEAS, welcomes the renewed commitment by the European Commission to push for the development of a new sustainable, smarter and greener economy to help Europe to overcome the sharp economic downturn of these years, as outlined in the working document on the “EU 2020” Strategy.

Nanoelectronics is a key enabling technology for creating value based on knowledge, as recognized in the recent communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on “Preparing our future: Developing a common strategy for key enabling technologies in the EU”.¹

The document recognizes that Nanoelectronics is driving the transformation to a sustainable economy by allowing better energy management, by enabling renewable power sources and by increasing safety in transports, industry and home. Energy efficiency, sustainable mobility, together with security, health and education have been identified as top application priorities of the Nanoelectronics Platform, as presented in the original Vision 2020 and in the successive Strategic Agenda, and are being implemented through several R&D projects in the running Joint Technology Initiative

But research results must also translate into economic and social benefits and AENEAS find especially important the attention that the document gives to the implementation of an industrial policy to keep EU industry competitive in the world market, which is needed to reap the benefits of the R&D investments. A recent document by the Chinese Government on the strategy for economic recovery² puts stress on the importance of promoting the growth of ICT industry, even by promoting the transfer of new industry from abroad. It would be regrettable if it should happen at the expenses of European industry.

A few of the issues mentioned in the “EU 2020” strategy are of special importance for the European Nanoelectronics industry:

- Maintaining a level playing field. The importance of Nanoelectronics, and ICT in general, as a key enabler for economic growth has been recognized by several regions (see also the above mentioned Chinese document), and measures have been taken to attract foreign investment and to protect national industry³. Europe must take steps also in this sector to avoid losing its know-how base and industrial sector to other regions.

¹ COM(2009) 512/3

² “Adjustment and Stimulus Plan for ICT Industry”, from the EU-China Information Society Project

³ “2008 Competitiveness Market Report”, EECA-ESIA



- Overhauling state-aid rules. While they can still play an important role in preventing unfair competition inside the UE, they should allow European companies to benefit from the advantages of the economy of scale and to take the opportunities of a single European market. State-aid rules should not stifle existing excellence, because it is not present in all European countries, but support each country to develop its own excellence to the advantage of all Europe.
- Fully exploiting the single market. In the context of globalization, economy of scale remains a critical factor, not only for efficient productions, but also for establishing standards in emerging sectors. The “EU 2020” policy document clearly identifies new markets, addressing sustainable growth, a greener economy, and improved services, that could be the drivers of the recovery of Europe, in line also with the leading markets of the Aho’s report⁴. However all these sectors are heavily dependent on public spending. It is therefore extremely important that, as stated in the document, public procurement is coordinated among European governments to avoid that diverging specifications and fragmented markets prevent the European industry from achieving the required economy of scale, and make Europe dependent on standards developed in larger, more homogeneous regions.

European Nanoelectronics industry has already demonstrated its capability to contribute to the objectives outlined in the “EU 2020” document. Indeed the results obtained by the car industry by the massive introduction of Nanoelectronics, both in terms of reduced fuel consumption and reduced casualties by travelled kilometers, give good evidence of the potential of the technology. Multi-national R&D and industrial basis, cooperation among competitors and close teamwork with public research are current praxis since several years in European Nanoelectronics, and have allowed Europe to reach leadership in critical sectors like mobile communications and automotive. But we cannot give even those success stories for granted. It is necessary a strong effort in European policy towards a real implementation of the Lisbon strategy with special focus on three key issues: clear priority to key enabling technologies, coordination of R&D investment with industrial strategy, and, above all, a better cooperation among European countries, to make the single European market a reality.

ENIAC/AENEAS/CATRENE for technology as well as ITEA2/ARTEMIS, for software and system architecture have demonstrated the capability of European Nanoelectronics industry and research to cooperate constructively towards the analysis of actual European weaknesses and the implementation of recovery actions. They are available to continue to play their role in addressing the future challenges, in support to the initiatives that the Commission intends to start for the implementation of the Europe 2020 strategy.

⁴ “Creating an Innovative Europe” Report of the Independent Expert Group on R&D and Innovation appointed following the Hampton Court Summit. January 2006.