The Nanoelectronics 2020 Initiative (ENIAC)

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Objectives, milestones and deliverables

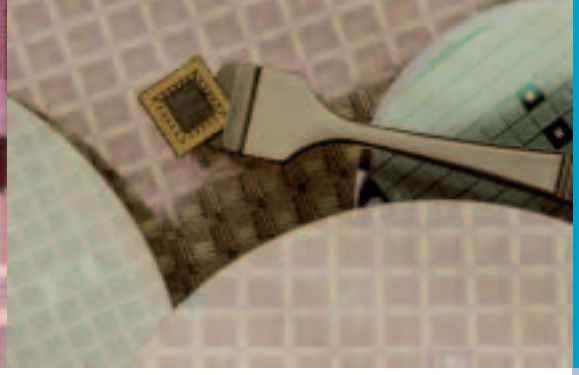
Nanoelectronics are significant drivers of innovation and growth and are crucial to the EU's future competitiveness and societal development. They are integral components in products for mobile communications, transport, computing and consumer products, amongst others.

The value of electronic components in innovative products is growing, as extra functionalities and intelligence are added. The sector faces a number of challenges, including fragmentation of its research efforts, increasing technological complexity and competitive pressures from other world regions. At risk are not just short-term opportunities for new products and services, but loss of the ability to innovate in those sectors with the greatest potential for value creation and growth in the long-term.

The ENIAC Nanoelectronics Joint Technology Initiative (JTI) provides a framework to coordinate resources and funding from the Framework Programme, industry, national research and development (R&D) programmes and intergovernmental schemes (such as EUREKA). By integrating R&D efforts, ENIAC will foster durable large-scale strategic partnerships between European industry and institutes, thus anchoring R&D in Europe and boosting European competitiveness.

The JTI builds on the work of the ENIAC European Technology Platform.
More specifically, it focuses on research, development and innovation for 'ambient intelligence' – these are environments that are aware of our presence and responsive to our needs – for applications in healthcare, energy, mobility & transport, security & safety, communication and education & environment.

ENIAC will encourage long-term investment in nanoelectronics R&D. It will create sufficient critical mass, a higher level of flexibility and a better interaction between research and production. In addition to an economic impact exceeding €100 billion, the JTI is expected to create thousands of jobs in Europe. This is Europe's response to globalisation, changing business and research models, as well as growing technological complexity and costs.



JTIs

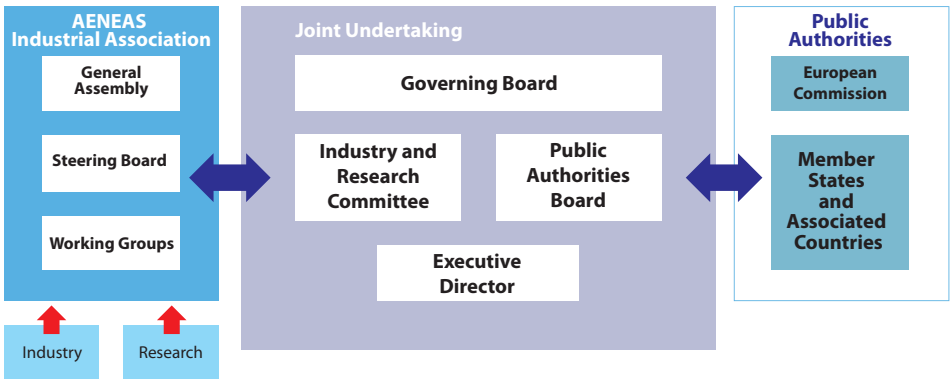
Membership and Structure

In the Commission's proposal for the ENIAC Joint Undertaking, which would be set up to implement the JTI, the founding members are R&D performers (industry and research organisations), the European Community and Member States (public authorities).

The main tasks of the ENIAC Joint Undertaking are to coordinate the research through organising calls for proposals and to manage the execution of research projects. The ENIAC Joint Undertaking is managed by an Executive Director. Its governance structure comprises a governing board, a public authorities board and an industry/research committee.

Industry and research organisations participate in the JTI through AENEAS, the ENIAC Industrial Association, which was established in November 2006 under French law by ASML, Infineon, NXP, Robert Bosch, STMicroelectronics, SOITEC, Thales and Thomson. Open to membership from any organisation conducting nanoelectronics research and development in Europe, it currently has over 50 members. The activities of the ENIAC European Technology Platform, including the Strategic Research Agenda, have largely been taken over by AENEAS.

Members of AENEAS participate in key decisions and shape the policies and evolution of the ENIAC research agenda. Membership also provides access to an extensive network of respected research partners. Information about membership is available at http://www.eniac.eu.



Full title:

ENIAC (European Nanoelectronics Initiative Advisory Council) Joint Technology Initiative

Founding members:

- European Community (represented by the Commission)
- Member States
- AENEAS (industrial association)

Budget (2008-2017) is	**€ 3 billion**
European Community:	€ 0.45 billion
Member States:	€ 0.8 billion
Private sector:	€ 1.7 billion (in kind) + € 0.03 billion (cash)

Further information:

- http://cordis.europa.eu/fp7/ict/nanoelectronics/eniac_en.html

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Joint Technology Initiatives are a new way of realising public-private partnerships in research at European level. They provide a framework to mobilise and coordinate research efforts across Europe in order to define and implement common research agendas in key areas where research and development can contribute to Europe's growth and competitiveness objectives as well as to the wellbeing of its citizens.

http://cordis.europa.eu/fp7/jtis