

NEREID

KICK-OFF meeting
Berlin, December 1, 2015

ENI2 and the genesis of NEREID

L. Baldi



The motivation for ENI2



There is an increasing gap between basic research (TRL 1-2) covered by Excellent Science and application-oriented research (TRL4-8 in theory, TRL6-9 in practice) of ECSEL JU.

- Close the increasing gap between basic and industrial research increasing coherence along the chain.
- Define European Collaborative R&D&I Priorities
 - Build roadmaps across various horizons and actors
 - Identify roadblocks : shared R&D&I priorities
- Facilitate the execution of the research agenda:
 - Feed the priorities into project calls,
 - Identify competence centers,
 - Be a forum for collaborative research projects to tackle the priorities:
 - Access to research infrastructure (design & technology)
 - Joint research projects
 - Coordination of research initiatives
 - Education

- ENI² is a “coalition of the willing”, open to all the research community in Nanoelectronics.
- Key requirements for partners are:
 - Competence
 - Willingness to contribute
 - Representativity
- From an administrative point of view, ENI² is a working group of AENEAS, reporting to AENEAS Support Group.
- It incorporates the responsibilities of the former CATRENE Scientific Committee.
- Chair of Scientific Community Council is Member of ENI² Steering Committee.

From road mapping to R&D&I facilitation

- Focus on priorities

Define European Collaborative R&D&I Priorities

- Build road maps across various time horizons and actors
- Identify roadblocks: R&D&I priorities



Facilitate Execution of Research Agenda

- Identify education needs
- Identify centres of excellence
- Forum to broker collaborative projects addressing priorities



Objective:

develop a roadmap for Nanoelectronics in Europe, with a large participation of industrial and academic experts, chosen outside project partners.

Scope:

From Beyond CMOS to Equipment and Manufacturing

- Budget: 1MEuro,
- Duration: 36 months.
- Coordinator: Francis Balestra, INP

Status:

Grant Agreement signed: start November 16th 2015

Back up

Present Steering Committee

- L. Baldi, ENI² Chairman for AENEAS
- F. Balestra, Grenoble INP
- W. Dettmann, Infineon
- P. Grabiec, ITE
- D. Holden, CEA-LETI
- A. Ionescu, EPFL
- A. Mathewson, Tyndall National Institute
- J. Pelka, Fraunhofer Gesellschaft
- P. Pype, NXP
- E. Sangiorgi, IUNET-University of Bologna
- A. van den Bosch, IMEC
- M.W.Graef, TU Delft as SCC chair

Vision and Mission

Mission

- To improve the innovation cycle by closing the gap between advanced research and industrial needs in the sector of Micro- and Nano-electronics technology and applications.
- To support the EU semiconductor sector by driving the research agenda of cooperative projects in Europe on technologies with high impact on economy and society.

Vision

- To contribute to structure and coordinate research, development and innovation in Europe, in the field of Micro- and Nano-electronics, address fragmentation and avoid unnecessary duplication of effort to create a European eco-system from research to industry.