Other Strategies and Roadmaps

There exist a lot of strategic and roadmap activities in micro- and nanoelectronics all over the world. Below we list some of them, which seem to be most important for the NEREID project.

International Technology Roadmap for Semiconductors (ITRS)

Since 2015, the International Technology Roadmap for Semiconductors (ITRS) has been a prediction about the future development of semiconductor technology to be a model for all major chip and device manufacturers. A panel of experts from the worldwide semiconductor industry, updated this roadmap every two years, which has been supplemented by updates in the intervening years. In 2016 there started several activities to fill the gap, that the missing updates of the ITRS created. Among these is the IRDS initiative. Most recent information can be taken from a talk “Roadmap Evolution: NTRS, ITRS, ITRS 2.0, IRDS” given by Paolo Gargini (->Slides) during the 2nd General Workshop of NEREID. Further information is below.

International Roadmap for Devices and Systems (IRDS)

The IRDS initiative focuses on an International Roadmap for Devices and Systems (IRDS) through the work of roadmap teams closely aligned with the advancement of the devices and systems industries. Led by an international roadmap committee (IRC), International Focus Teams (IFTs) will collaborate in the development of a roadmap, and engage with other segments of the IEEE, such as Rebooting Computing, and related industry communities, in complementary activities to help ensure alignment and consensus across a range of stakeholders, such as Academia, Consortia, Industry or/and national laboratories. The IEEE supports the IRDS to ensure alignment and consensus across a range of stakeholders to identify trends and develop the roadmap for all of the related technologies in the computer industry.

AENEAS Strategic Agenda

On 18 October 2016, AENEAS published its AENEAS Strategic Agenda, which presents the ambitions of AENEAS members in cooperative R&D activities, as well as the expected contributions to the solution of societal challenges and the creation of economic value for Europe. The Agenda builds on the paper “Vision, Mission and Strategy” (VMS), which AENEAS published together with CATRENE in 2013, in which the R&D landscape of European micro- and nanoelectronics was highlighted from a strategic point of view.

ECSEL Multi Annual Strategic Plan

The technical goals and the strategy of the ECSEL Joint Undertaking (JU) are described in its Multi-Annual Strategic Plan (MASP). The details of the (research) work to be carried out annually, as well as the funding for projects selected via the Calls process, is described in an annually published Work Plan document. Despite a longer timeframe perspective (5 years), the MASP is updated at shorter intervals (mostly once per year and optionally at any time) in order to keep abreast of technological and market developments in the fields of Electronic Components and Systems and also in the application of these technologies. The latest versions of the MASP and the ECSEL Work Plan are to be found here.

CATRENE European Roadmap for Design Automation

The CATRENE European Roadmap for Design Automation in semiconductor products (formerly known as the “MEDEA+ EDA Roadmap”), describes mainly “system on a chip” (SoC) and “System in Package” (SIP) products and their technologies in terms of new markets. The roadmap has been a living document and acted as an active European forum with contributions from all. Activities have been stopped at the end of the CATRENE in 2015.

CATRENE White Book

At irregular intervals or as required CATRENE (Cluster for Application and Technology Research in Europe on Nanoelectronics) prepares and publishes White Books, which are the basis for CATRENE calls. Edacentrum supports this by professional cooperation.
Source URL: https://www.nereid-h2020.eu/content/other-strategies-and-roadmaps

Links:
[3] https://www.nereid-h2020.eu/content/2nd-general-workshop