

David Guedj  
EU-ICT/FET-nanoICT proactive initiative  
Belgium

This presentation will give an overview of the Commission's 7th Framework Programme (FP7), specifically the ICT program. It will address the big research and technological issues that are covered in the Future and Emerging Technologies – Proactive (FET-Proactive) part of this programme.

Starting with the Nano-ICT Devices and Systems initiative (FP7 - Call 1), the emphasis will be on the Coordination Action, also called "Nano-ICT" Coordination Action, a non-research instrument meant to a.o. organise and cluster the activities of the set of projects grouped under the Nano-ICT Devices and Systems. The working groups set up by Nano-ICT will be briefly described.

Further to this ongoing activity, future initiatives scheduled for FET-Proactive in years 2009-2010, will be presented. The two most relevant to TNT are definitely "Toward Zero-Power ICT", that will be addressing energy conversion approaches and techniques in order to overcome the growing energy dissipation at the smaller scales, and "Molecular-Scale Information Systems" that will address the ability for a single molecule and small collection of molecules to perform information processing and computing. The latter initiative takes advantage of the current possibilities to position and control single atoms.

Finally, we will highlight the main drivers for FET-Proactive and illustrate by one or two examples, the unique nature and the assets of a european collaborative research programme for future and long-term ICT.