

EU-Taiwan Workshop on transition to 450 mm wafer processing

Gisele Roesems

Deputy Head of Unit Nanoelectronics
Information Society & Media Directorate-General
European Commission



Far Eastern Plaza Hotel, Taipei, 24 March 2009



Background

➤ Debate on transition to 450mm wafer processing launched in May 2008

- Intel, Samsung Electronics and TSMC
- Target starting transition in 2012
- Cooperative approach to minimize risks and costs

➤ Of interest to limited number of IC makers

➤ Whole foodchain linked to them affected

➤ Financial and economical crisis

!!

transition yes, but timeline unclear

European Workshop 12/2008

- European Workshop organized in December 2008 to find out to which extent European players are participating or planning to participate
 - A lot of interest
 - Several research institutes and equipment and material suppliers are already exploring and developing their first 450 mm technologies
 - Set up of a European 450 mm E&M initiative
 - Europe is preparing a coordinated approach => single voice of European players in the transition process

EU-Taiwan workshop 03/2009

- Objective: To offer the opportunity to explore business/R&D cooperation possibilities between European and Taiwanese organisations
- Expected outcome: concrete links leading to **collaborative research and development**
- Underlines the interest of the EC to stimulate **global cooperation** of European companies in the field of semiconductor manufacturing (not only 450 mm transition)
- Europe wants to participate in global initiatives, offering its competence, leading to critical mass

EU Financial support 450mm transition process

➤ FP7/ICT Workprogramme 2009-2010:

Call 5: Objective 3.1 Nanoelectronics Technology

to support **European equipment and materials suppliers**

- preparatory work : small or medium-scale focused research projects (STREP)
- linking with upcoming global activities: coordination and support actions (CSA)

➤ **Date of publication 31 July 2009; deadline 3 November 2009**

➤ **Open for International Cooperation**

3.1 Nanoelectronics technology

- Miniaturisation and functionalisation
- Manufacturing technologies
 - New manufacturing approaches, processes and tools
 - Joint assessments of novel process/metrology equipment and materials
 - Supporting 200/300mm wafer integration platform
 - Preparatory work for 450 mm wafer processing targeting material and equipment companies (eg. metrics, interfaces, standards, ...)
- Support measures
 - Roadmaps, benchmarks, selection criteria for the industrial use of 'Beyond CMOS'
 - Access to state-of-the-art technologies for prototyping and low volume and to design expertise and commercial tools
 - Stimulation of interest of young people, training and education
 - Linking of R&D strategies and stimulation of International Cooperation, in particular a.o. with Taiwan
 - Support and coordination actions for materials and equipment suppliers for preparatory work for 450 mm processing (eg. roadmapping, ...)

Let's work together !



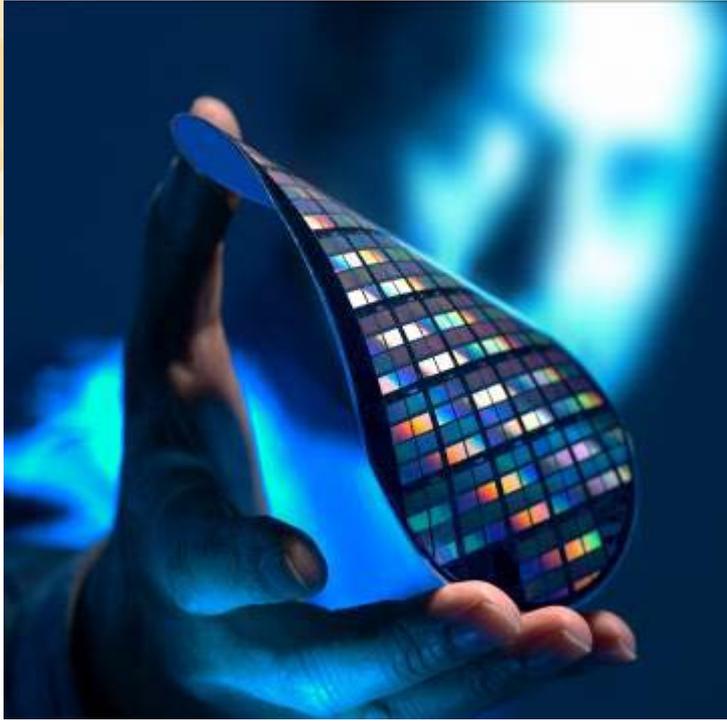
Thank you!

➤ the sponsors

- National Science Council, Taiwan
- European Economic and Trade office
- Department of Industrial Technology, MOEA, Taiwan

➤ the co-organisers

- National Taiwan University
- EU-FP7 NCP-Taiwan office
- National Taiwan University of Science and Technology



*Thank you
for your attention*

More information:

<http://cordis.europa.eu/fp7/ict/nanoelectronics/>

Georg.Kelm@ec.europa.eu

Gisele.Roesems@ec.europa.eu