



Brussels, 14 November 2012

INVITATION TO SUBMIT AN EXPRESSION OF INTEREST TO COORDINATE A “KET PILOT LINE PROJECT”

1. MOTIVATION

In October 2011, the ENIAC Joint Undertaking has issued its first invitation to express interest in executing a Key Enabling Technology (KET)¹ Pilot Line project, pioneering the very first attempt to implement the concept. The invitation generated genuine interest the National Funding Authorities, who almost doubled their pre-committed contributions, while the response of the Industry at large exceeded by far the expectations, producing altogether 19 project ideas located in 8 ENIAC member States. In the subsequent call for proposals, 5 projects have been selected among the proposals that entered the competition; they are now in negotiations towards a funding decision to be reached in a few weeks.

Encouraged by this success, the ENIAC JU issues now a new invitation to express interest in coordinating a KET Pilot Line project.

2. BACKGROUND

The High-Level Experts Group (HLG) recognized the “Micro- and nanoelectronics, including semiconductors” as a KET and recommended in its final report “that the EU and its policy makers ... urgently engage in a radical rebalancing of resources and objectives in order to retain critical capability and capacity in these domains of vital European importance.² The integrated approach to KETs is based on the “Three Pillar Bridge” model to pass across the “Valley of Death”, enabling the translation of ideas into marketable products.

The ENIAC Joint Undertaking, chartered to “increase and leverage private and public investment in the sector of nanoelectronics in Europe... thus contributing to strengthening Europe's future growth, competitiveness and sustainable development”³ positioned itself as the instrument of choice for immediately implementing the KETs policies.

3. KET PILOT LINE PROJECT PROPOSALS

Adapting a Wikipedia definition, a pilot line (or a pilot plant) is a small processing system which is operated to generate information about the behaviour of the system for use in the design and the operation of larger facilities.

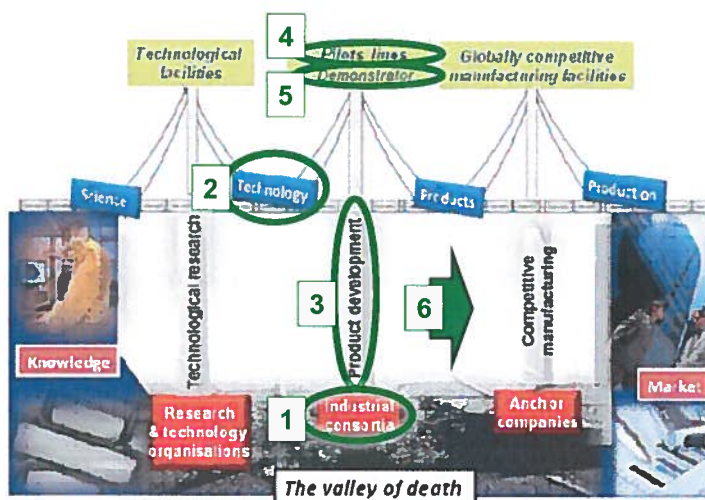
The ENIAC JU invites the R&D actors in the micro- and nanoelectronics field to express their interest to coordinate a “KET Pilot Line Project” addressing the “Second Pillar” of the “Three Pillar Bridge”, that

¹ Commission communication “Preparing for our future: Developing a common strategy for key enabling technologies in the EU, Brussels, 30.09.2009”, COM(2009) 512

² HIGH-LEVEL EXPERT GROUP ON Key Enabling Technologies, **Final Report**, June 2011, http://ec.europa.eu/enterprise/sectors/ict/files/kets/hlg_report_final_en.pdf

³ Council Regulation (EC) No 72/2008, OJ L 30, 4.2.2008, p. 21

- (1) shall be executed by an industrial consortium including at least three non-affiliated partners from three different Member States of the European Union,
- (2) using an innovative technology
- (3) to develop innovative products, meeting social challenges, and
- (4) establishing a new, realistic R&D environment, a facility (“Pilot Line”) capable to generate information about the behavior of the equipment, materials and processes in a real life facility and to manufacture
- (5) demonstrators in small volume in order to establish their value and potential while
- (6) including a deployment plan to a real life European manufacturing site.



More detailed criteria are enumerated in the APPENDIX 6 of the Final Report of the HLG on KETs. They are:

- **Status of industrial asking for public support:** Project coordinator must be a company with at least one significant production site in the EU, unless it is a start up
- **Check of market distortion of the KET pilot line:** The output in the next three years should be small in comparison to world market, unless it is an emerging market
- **Technology leadership:** The R&D results should be leading edge compared to competition
- **Impact on societal challenges:** Advances in applications responding to societal challenges
- **EU added value:** Benefit for EU member states outside the location of pilot line: suppliers, customers, RTOs; convergence or phasing-out region; environmental impact
- **Potential for creating manufacturing jobs in Europe:** Direct sustainable jobs to be generated or safeguarded
- **Commitment from industry:** First exploitation of generated IP and technology in Europe. Involvement of industry partners along the value chain, reinforcing the EU competitiveness on KET : opportunity for suppliers to demonstrate advanced materials and technologies on the upstream value chain, opportunity for end users on the downstream value chain to foster the innovation of final products on the market
- **Criteria for success:** description of critical success factors and objectives to be achieved
- **Skills and education:** use of pilot line for appropriate skills / education training.

4. CONDITIONS FOR SUBMISSION

To be taken into account, the Expression of Interest must describe a project consistent with the Pilot Lines on Key Enabling Technologies concept reflected in the ANNEX and with the rules of submission of the Expressions of Interest hereunder:

- The submissions shall consist of the filled template shown in APPENDIX as a Word or a pdf file attached to an email addressed to eniac@eniac.europa.eu
- Each point in the template must be addressed in a concise manner
- The submission shall be received by the ENIAC JU secretariat before 15 February 2013,
- 17:00 Brussels time
- The submission shall be in English

5. CONFIDENTIALITY

The Expression of Interest Submitted shall be handled as confidential information. They will be made visible to a Committee including persons and entities under Non-Disclosure Agreement, as follows:

- ENIAC JU personnel
- Industry experts non-affiliated with any legal entity involved in ENIAC JU projects
- The Public Authorities having a need to know (exclusively, the National Public Authorities hosting members of the consortium, as described in the EoI submission, and the European Commission).

6. FURTHER ACTIONS

The information collected from the EoI shall be summarized by the ENIAC JU Secretariat in a form ensuring the confidentiality of each submission, taking into account the Committee comments. It shall be used as a basis to assess the adequacy of the ENIAC JU programme in implementing the KET policies.

Upon a positive assessment conclusion, the ENIAC JU shall launch an open and competitive Call for Proposals. The submission of an Expression of Interest will not be a precondition for responding to such a Call for Proposals.



Andreas Wild
Executive Director

1. APPENDIX: TEMPLATE FOR SUBMITTING AN EXPRESSION OF INTEREST TO COORDINATE A “KET PILOT LINE PROJECT”

1. Project coordinator
 - a. Legal name
 - b. Address
 - c. Relevant manufacturing facility in the EU
 - d. Contact person: (First and last name, phone number, email address)
2. EoI title and acronym
3. Description (**max. 1 page**)
 - a. General goals
 - b. Innovations Proposed
 - c. Expected impact
4. Schedule of the project
 - a. Prospective starting date
 - b. Duration to completion
5. Compliance with the KET Pilot Line Concept
 - a. Description of the envisioned consortium: for each partner in the project:
 - i. Name of the legal entity
 - ii. Country
 - iii. Address
 - iv. Type of partner (corporate, SME or scientific institute)\
 - v. Estimated costs
 - b. Technology leadership
 - i. Baseline characteristics (e.g. wafer size, feature size, package type etc.)
 - ii. Derivatives, specialties
 - c. Product novelty, societal challenges addressed
 - i. Brief description of product functionality
 - ii. Societal challenges and markets they will address
 - d. Description of the facility
 - i. Location
 - ii. Technical capabilities
 - iii. Capacity
 - iv. Employment data (new and secured jobs)
 - v. Impact on skills development and education
 - e. Demonstrators: for each demonstrator:
 - i. Brief functional description
 - ii. Volume necessary for validation and determination of potential
 - iii. Market distortion assessment (e.g. comparison with the existing market for similar product families)
 - f. Deployment plan
 - i. Manufacturing site
 - ii. Readiness of the manufacturing site for deployment
 - iii. Impact on employment (new and secured jobs)
 - iv. IP valorization in EU
6. EU added value
 - a. Short description of the interest / contribution of each partner (~50 words)
 - b. Benefits to Member States outside the location of the Pilot Line
7. Success criteria on key project elements, such as: technology/product leadership, employment etc.
8. National Funding Entities
 - a. Have the national Funding Entities been informed about this submission? If yes, indicate:
 - i. Authority contacted
 - ii. Contact person
 - iii. Brief summary of the outcome of the contact.