Artemis and ENIAC

Prof. Luis Melo – Delegado Nacional
Filipa Duarte – NCP
Outline

- Technology Platforms
- Artemis and ENIAC Joint Undertaking

Prof. Luis Melo – Delegado Nacional
European Technology Platforms (ETP)

Stakeholders, led by industry, come together to agree a common vision for the technology.

- Bottom-up process with key stakeholders in a specific domain
- Key deliverable: Strategic vision document

Stakeholders, define a Strategic Research Agenda setting out the necessary medium to long-term objectives for the technology.

- Co-ordinated by an Advisory Council
- Consensus-based
- Deployment strategy

Stakeholders, implement the Strategic Research Agenda with the mobilisation of significant human and financial resources.

- Through collaborative research in FP7 & with other resources, or
- Through a Joint Technology Initiative which integrates funding sources
Joint Technology Initiatives (JTI)

- Arising from Technology Platforms
- Formalized public-private partnerships
  - Covering a focused set of R&D challenges
  - Combining private and public (European and national) financial resources
- Why?
  - Strategy set by industry
  - Very limited number of cases with huge challenges
  - Inability of existing instruments to achieve objectives
  - Impact on industrial competitiveness
  - Strength of commitment from industry
  - Capacity to attract additional national support and leverage industrial funding
Characteristics ARTEMIS & ENIAC JTIs

- Industrially-driven applied research programme incl. application areas
- Large initiatives to increase critical mass
- High level of SME participation
- Long term strategic partnerships
- Budget certainty, fast cycle time, decentralisation
- Common approach, common processes and co-funding by MS and Commission towards common goals
- Increased R&D funding

Boosting the competitiveness of EU industry whilst building the European Research Area
Joint Undertakings: ARTEMIS & ENIAC

- Bodies set up by the Community
- Duration: till 31-12-2017
- Seat: Brussels
- Members: Industry, European Community, a set of Member States and Associated Countries

Objectives
- Define and implement a Research Agenda
- Support R&D activities (Calls for Proposals)
- Promote the public-private partnership (increase investments)
- Achieve synergy and coordination with other European R&D
- Promote the involvement of SME’s
ARTEMIS/ENIAC JU: Who is involved?

**Industrial Association**
- ARTEMISIA / AENEAS
  - General Assembly
  - Steering Board
  - Working Groups

**Joint Undertaking**
- **Governance Board**
  - Strategy and rules of operation, supervision
    (Votes: 50% industrial ass. & 50% PA’s)
- **Industry and Research Committee**
  - Strategic planning
- **Public Authorities Board**
  - Calls and project selection
    (Voting rights proportional to € commitments)
- **Executive Director**
  - Operations and finances

**Public Authorities (PA)**
- EC
  - Member States & Associated Countries
Established in Paris (Association under French law)

Dual purpose: Continuing ENIAC ETP activities, representing R&D actors in JU

Constituency:

Chamber A: SMEs (fee 1000€ per year)
Chamber B: Public Research Organisations (1000€)
Chamber C: Corporate (5000€/10000€ depending on size)
Associates (non-voting, 1000€)

Steering Board: 3 SME’s, 3 Research Organisations, 9 Corporate members
Established in Eindhoven (Association under Dutch law)

**Dual purpose:** Continuing ARTEMIS ETP activities, representing R&D actors in JU

**Constituency:**
- Members A: SMEs (fee 1000€ per year)
- Members B: Public Research Organisations (1000€)
- Members C: Corporate (5000€/10000€ depending on size)

### Associates (non-voting, 1000€)

+ variable contribution

**Presidium:** EADS Deutschland GmbH, NXP Semiconductors, Tekniker IK4, TIVIT Ltd., Finmeccanica
Why joining the Industrial Associations?

- ARTEMISIA and AENEAS represent European R&D actors in the JU’s
- Unique opportunity to shape the future evolution of the industrial R&D!
- Definition of Strategic Research Agenda and Work Programmes
- Definition of industrial policy and activities of the JU
- Voting rights for elections and key decisions
- Stay involved in the activities of the Technology Platform
- Extensive and respected network of potential R&D partners
Artemis and ENIAC Calls 2013
Outline

- Previous Portuguese Participation
- 2013 Calls
- Rules of participation

Filipa Duarte – NCP
## Previous PT Participation

<table>
<thead>
<tr>
<th>Tema</th>
<th>ARTEMIS</th>
<th>ENIAC JU</th>
<th>TOTAL</th>
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### Previous PT Participation

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<td><strong>Co-financiamento PT</strong></td>
<td>0.50 M €</td>
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Artemis Call 2013

- Single stage procedure
- **Deadline:** 6 June 2013 (17h00 Brussels time)
- **Evaluation expected:** September 2013
- **Purpose:**
  - Industry-driven projects in the field of embedded systems
  - Aim at generating new and improved technologies
  - Apply technologies in products, processes or services
  - Objective to improve sustainability, facilitate the emergence of new markets and applications that respond to societal needs
- **Consortium:** at least three ‘legal entities’ established in at least three different ARTEMIS Member States
- **Duration:** typically three years
- **2 types** of proposals:
  - ARTEMIS Sub-programmes (ASP)
  - ARTEMIS Innovation Pilot Programmes (AIPP)
Artemis Call 2013
Artemis Call 2013
Artemis Call 2013

- Same rules of participation as FCT projects
- To be spent with Portuguese participants only
  - 800,000 € for the ARTEMIS Innovation Pilot Programmes (AIPP)
  - 400,000 € for the ARTEMIS Sub-Programmes (ASP)
- 16.7% JU + FCT funding:

<table>
<thead>
<tr>
<th></th>
<th>Large Enterprises, Groups and Associations of Enterprises</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Research Institutes and Universities</th>
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<tr>
<td>Fundamental/Basic Research</td>
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<td>Experimental Development</td>
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Submit a funding eligibility form through the platform, at the same time they submit the full proposal.
Artemis Call 2013

- Same rules of participation as FCT projects
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<tr>
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ARTEMIS Sub-programmes (ASP) Topics

- ASP1: Methods and processes for safety-relevant Embedded Systems
- ASP2: Embedded Systems for Healthcare and Wellbeing
- ASP3: Embedded Systems in Smart environments
- ASP4: Embedded Systems for manufacturing and process automation
- ASP5: Computing platforms for Embedded Systems
- ASP6: Embedded Systems for Security and Critical Infrastructures Protection
- ASP7: Not open for this Call
- ASP8: Human-centred design of Embedded Systems
ASP Evaluation Criteria

1. Relevance and contributions to the objectives of the Call (weight = 1)
2. R&D innovation and technical excellence (weight = 1)
3. S&T approach and work plan (weight = 1)
4. Market innovation and market impact (weight = 2)
5. Quality of consortium and management (weight = 1)

Important Notices:
- ARTEMIS puts high emphasis on the downstream relevance of proposals
- Contribution to specific ASP targets takes precedence over contribution to the Industrial Priorities
- State-of-the-Art refers to that which is currently seen in an 'industrial' context
- S&T methodology and work plan must consider the specificities of the downstream nature of the ARTEMIS programme, addressing also prototype and/or demonstration phases
- Criterion 4. has a weight of 2, emphasis is given to the market innovation orientation of the ARTEMIS programme
ARTEMIS Innovation Pilot Programmes (AIPP) Topics

- AIPP1: Not open for this Call
- AIPP2: Innovative Integrated Care Cycles
- AIPP3: Seamless communication and interoperability - Smart environments: the Neural System for society
- AIPP4: Production and Energy Systems Automation
- AIPP5: Computing platforms for embedded systems
- AIPP6: Not open for this Call
AIPP Evaluation Criteria

1. Relevance and contributions to the objectives of the Call (weight = 0.5)
2. R&D&I and technical excellence (weight = 1)
3. Technological solution and work plan (weight = 1)
4. Market innovation and market impact (weight = 2)
5. Quality of consortium and management (weight = 1.5)

Important Notices:
- ARTEMIS puts high emphasis on the downstream relevance of proposals
- Contribution to specific AIPP targets takes precedence over contribution to the Industrial Priorities
- State-of-the-Art refers to that which is currently seen in an 'industrial' context
- S&T methodology and work plan must consider the specificities of the downstream nature of the ARTEMIS programme, addressing also prototype and/or demonstration phases
- Criterion 4. has a weight of 2, emphasis is given to the market innovation orientation of the ARTEMIS programme
ENIAC Calls 2013

- **Two-stage** procedure
- **Deadlines:**
  - Project Outlines (PO): 23 May 2013 (17h00 Brussels time)
  - Full Project Proposals (FPP): 12 Sept 2013 (17h00 Brussels time)
- **Evaluation of PO:** 14 June 2013
- **Selection of FPP:** October 2013
- **Call 8 purpose:** technological research and development activities such as concepts, experimental proofs and validation in laboratory conditions corresponding to Technology Readiness Levels (TRL) 2 to 5
- **Call 9 purpose:** targeting Pilot Line activities (TRL 4-8)
- **Consortium:** at least three ‘legal entities’ established in at least three different ENIAC Member States
- **Duration:** typically three years
ENIAC Call 2013
ENIAC Call 2013

- Same rules of participation as FCT projects
- To be spent with Portuguese participants only
  - 300.000€ for both ENIAC Calls
- 15% JU + FCT funding:

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Submit a funding eligibility form through the platform, at the same time they submit the full proposal.
ENIAC Topics (I)

- **Automotive and transport**
  - 1.3.1 - Intelligent Electric Vehicle
  - 1.3.2 - Safety in Traffic
  - 1.3.3 - Co-operative Traffic Management

- **Communications and digital lifestyle**
  - 2.3.1 - Internet Multimedia Services
  - 2.3.2 - Evolution To A Digital Life Style
  - 2.3.3 - Self Organizing Network
  - 2.3.4 - Short-range convergence

- **Energy efficiency**
  - 3.3.1 - Sustainable and Efficient Energy Generation
  - 3.3.2 - Energy Distribution and Management - Smart Grid

- **Safety and security**
  - 5.3.1 - Consumer and Citizens Security
  - 5.3.2 - Securing the European challenging Applications
  - 5.3.3 - Enabling Technologies for Trust, Security and Safety
ENIAC Topics (II)

- Design technologies
  - 6.3.1 - Managing complexity
  - 6.3.2 - Managing Diversity
  - 6.3.3 - Design for Reliability and Yield

- Semiconductor process and integration
  - 7.3.1 - Know-how on Advanced and Emerging Semiconductor Processes
  - 7.3.2 - Competitiveness through Semiconductor Process Differentiation
  - 7.3.3 - Opportunities in System-in Package

- Equipment, materials and manufacturing
  - 8.3.1 - Advanced CMOS - 1X nm & 450mm
  - 8.3.2 - More than Moore
  - 8.3.3 - Manufacturing
ENIAC Evaluation Criteria: PO

- Relevance of the objectives to the topic(s)
- Contribution at the European level
- Degree of application innovation
- Degree of IP development
- Expected market impact, in particular of the industrial partners
- Clarity in the description of the objectives and expected results
- Soundness of the project concept to achieve the results
- Quality of the consortium as a whole including complementarities, balance and involvement of SMEs

Important Notice:
- The assessment will not contain any scores for the POs, (only FPPs are scored)
ENIAC Evaluation Criteria: FPP

1. Relevance and contributions to the objectives of the Call (weight = 1)
2. R&D innovation and technical excellence (weight = 1)
3. S&T approach and work plan (weight = 1)
4. Market innovation and market impact (weight = 2)
5. Quality of consortium and management (weight = 1)
- Artemis Call: http://www.artemis-ju.eu/call2013

- ENIAC Call 8: http://www.eniac.eu/web/calls/ENIACJU_Call8_2013-1.php


- FCT:
  - Artemis: http://www.fct.pt/jti/artemis/concursos.phtml.pt
  - ENIAC: http://www.fct.pt/jti/eniac/concursos.phtml.pt
- **NCP Contacts:**
  - Filipa Duarte – [filipa.duarte@fct.pt](mailto:filipa.duarte@fct.pt), 21 391 76 55
  - Elisabete Pires – [elisabete.pires@fct.pt](mailto:elisabete.pires@fct.pt), 21 391 15 61

- **FCT Contacts:**
  - Rui Durão – [rui.durao@fct.pt](mailto:rui.durao@fct.pt), 21 391 15 43
  - Dina Carrilho – [dina.carrilho@fct.pt](mailto:dina.carrilho@fct.pt), 21 392 43 81

Obrigada pela atenção