



PROMETEO and ARTEMISIA

Estrategia PROMETEO



Agenda

- **ARTEMIS JTI**
- **ARTEMISIA**
- **PROMETEO & ARTEMISIA**

Joint Technology Initiatives

- For the first time ever, the European Union is changing the method of financing key technological research by launching **Joint Technology Initiatives (JTIs)**.
- The idea for JTIs came from the European Commission and has been supported by EU Heads of State and Government. **JTIs will pool the resources of private industry, EU and national programmes** to pursue ambitious common research objectives.

ARTEMIS JTI announced at IST2006

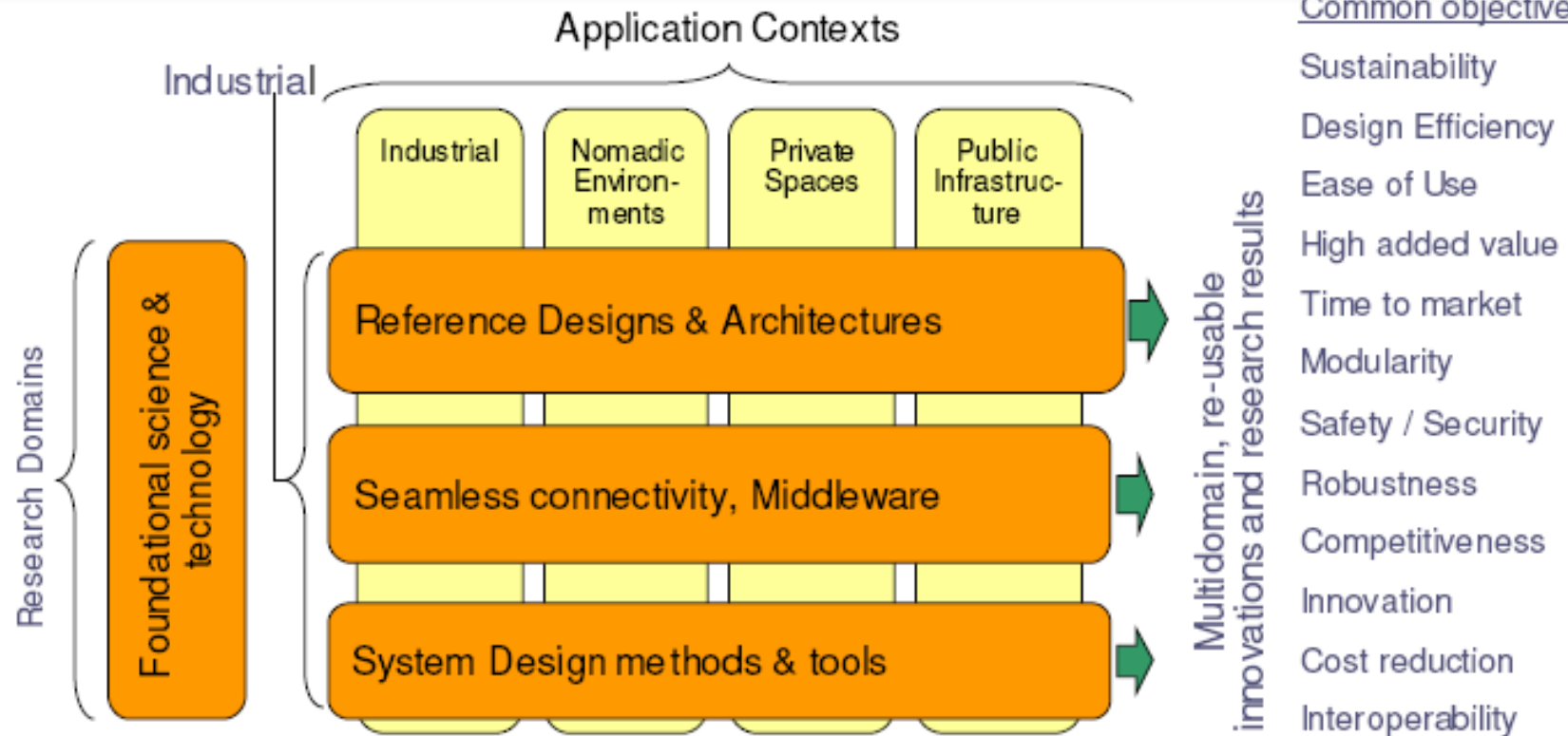
Viviane Reding, Member of the European Commission responsible for Information Society and Media. “FP7: A new framework for competition, innovation and growth” .IST 2006 - Strategies for Leadership. Helsinki, Finland, 21 November, 2006.

“... I'm glad to announce today that, in line with the political conclusions of the Lahti Summit, we are now preparing for a pioneer approach in European research. For the first time ever, we will make use of Article 171 of the EC Treaty to pool private, EU and national research investment in the form of a Joint Technology Initiative (JTI). The first such JTI, the ARTEMIS initiative, which will start in early 2007, will focus on embedded systems, this means on computer-research which is crucial for many industrial sectors.The budget of the ARTEMIS initiative will be around 3 billion over seven years. More than 50 percent of this would come from industry, while the rest would be financed by the European Commission and by the EU Member States and Associated States involved.”

ARTEMIS STRATEGY

- Develops and drives a joint European vision on Embedded Systems based on a **Strategic Research Agenda** (SRA) and corresponding roadmap
- Aligns fragmented R&D efforts in the ERA along common SRA at Community, intergovernmental, national, regional levels, and uses EU strength
- Benchmarks and links with relevant initiatives outside EU
- Advises on structural, educational and regulatory matters such as IPR, open source software, standards, research infrastructure, education, and training

ARTEMIS SRA



ARTEMIS OBJECTIVES 2016

1. 50% of embedded systems deploy Artemis results worldwide
2. Twice as many SMEs engage in embedded systems supply chain
3. Realise an integrated chain of European-sourced tools, to support development of embedded systems
4. Achieve seamless interoperability among ambient intelligence environments, at home, travelling, at work, in public spaces, ...
5. Generate at least 5 'radical innovations', comparable to microprocessor, DSP, software radio, etc.
6. Double the number of patents
7. Reduce cost of system design by 50%
8. Achieve 50% reduction in development cycles
9. Manage complexity increase of 100% with 20% effort reduction
10. Reduce by 50% the effort for re-validation and re-certification
11. Achieve cross-sector reuse

ARTEMIS early successes

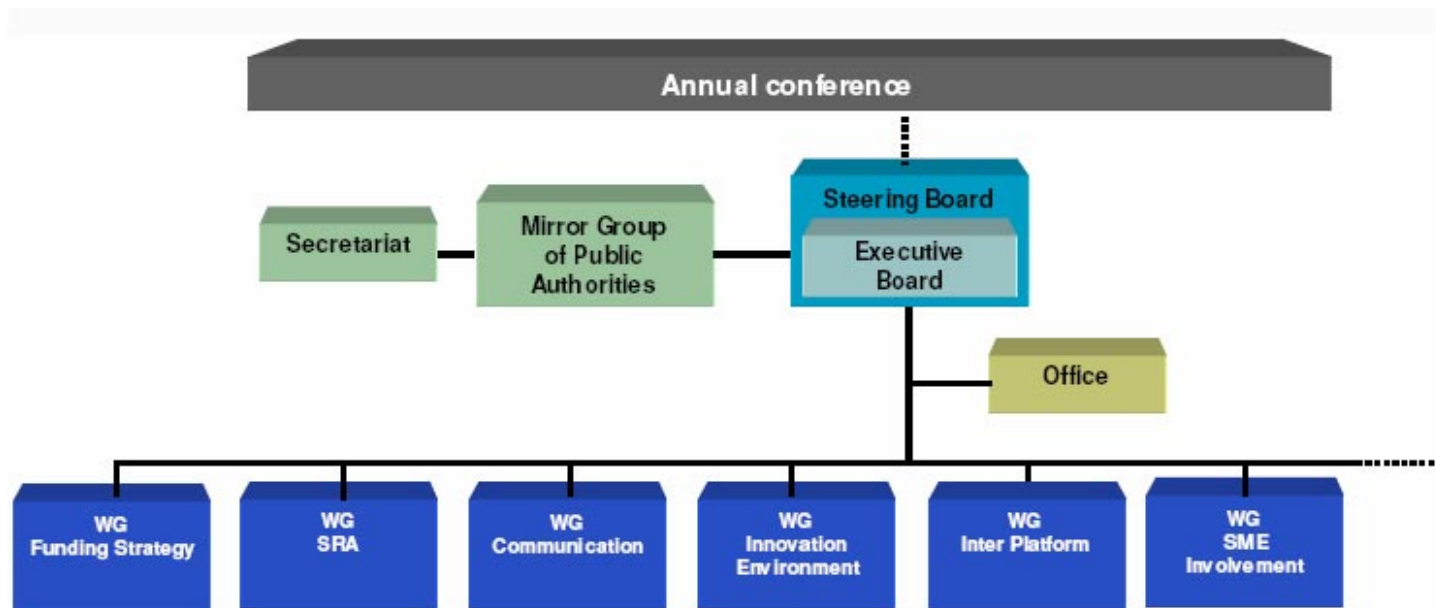
- So far ARTEMIS has succeeded...
 - Accelerating the pace of innovation and address the fragmentation of the market by **countering the fragmentation of R&D efforts across Europe**, private and public, by means of a common and compelling Strategic Research Agenda.
 - Ensuring that these strategic directions are properly **coordinated**, to form the backbone of a true European Research Area for Embedded Systems
 -and launching the **ARTEMIS JTI**

ARTEMIS JTI

- The first JTI to be launched in early 2007 will be **ARTEMIS**. The ARTEMIS JTI will steer Europe's research in embedded computing systems, which are increasingly essential for many key industrial sectors. This initiative will act as a beacon for further such initiatives to follow.
- The ARTEMIS JTI will develop **practical and efficient structures for stimulating Embedded Systems R&D** by implementing a Joint Technology Initiative (JTI) under article 171 of the Treaty

ARTEMIS and the JTI

ARTEMIS is not a legal entity, but an ETP....



....and **PROMETEO** was created in May 2005 as local TP.

ARTEMIS Work in progress....

➤ **Strategic Research Agenda** - *Chair: Laila Gide (Thales) & Eric Schutz*
(STMicroelectronics)

– **Mission:** To elaborate the Strategic Research Agenda

3 sub-Working Groups

- Reference Design and Architecture
- Seamless Connectivity and Middleware
- Design methods and Tools

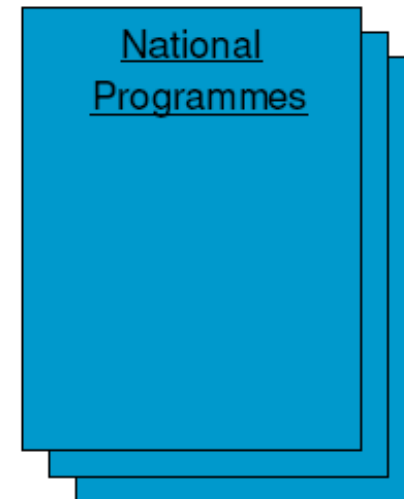
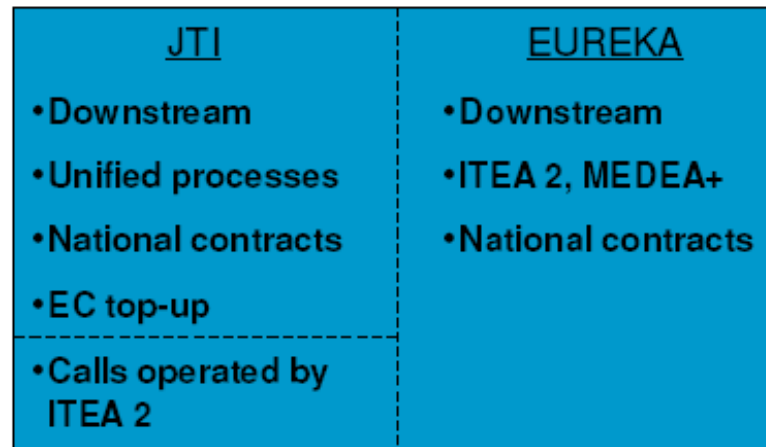
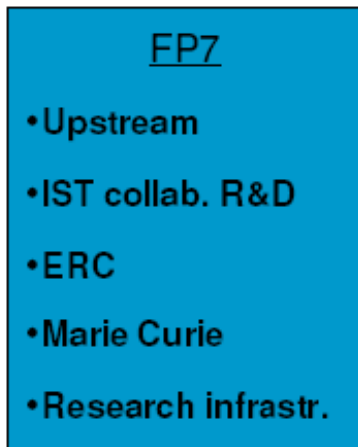
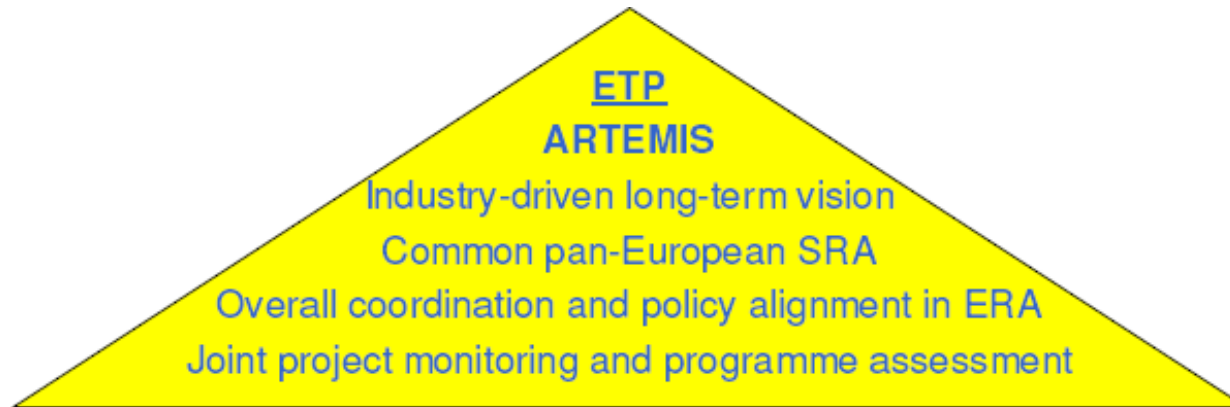
➤ **Funding Strategy & JTI Structure** - *Chair: Jan van den Biesen (Philips)*

– **Mission:** To assess options for funding instruments, mechanisms and structures under FP7 and make recommendations to Steering Board

– Objectives: Coordination & synergy between IST/FP and ITEA/MEDEA+ in EUREKA, and Harmonisation & synchronisation of ITEA/MEDEA+ funding between countries

➤ ...and more (Communications, inter-ETP collaboration, etc)

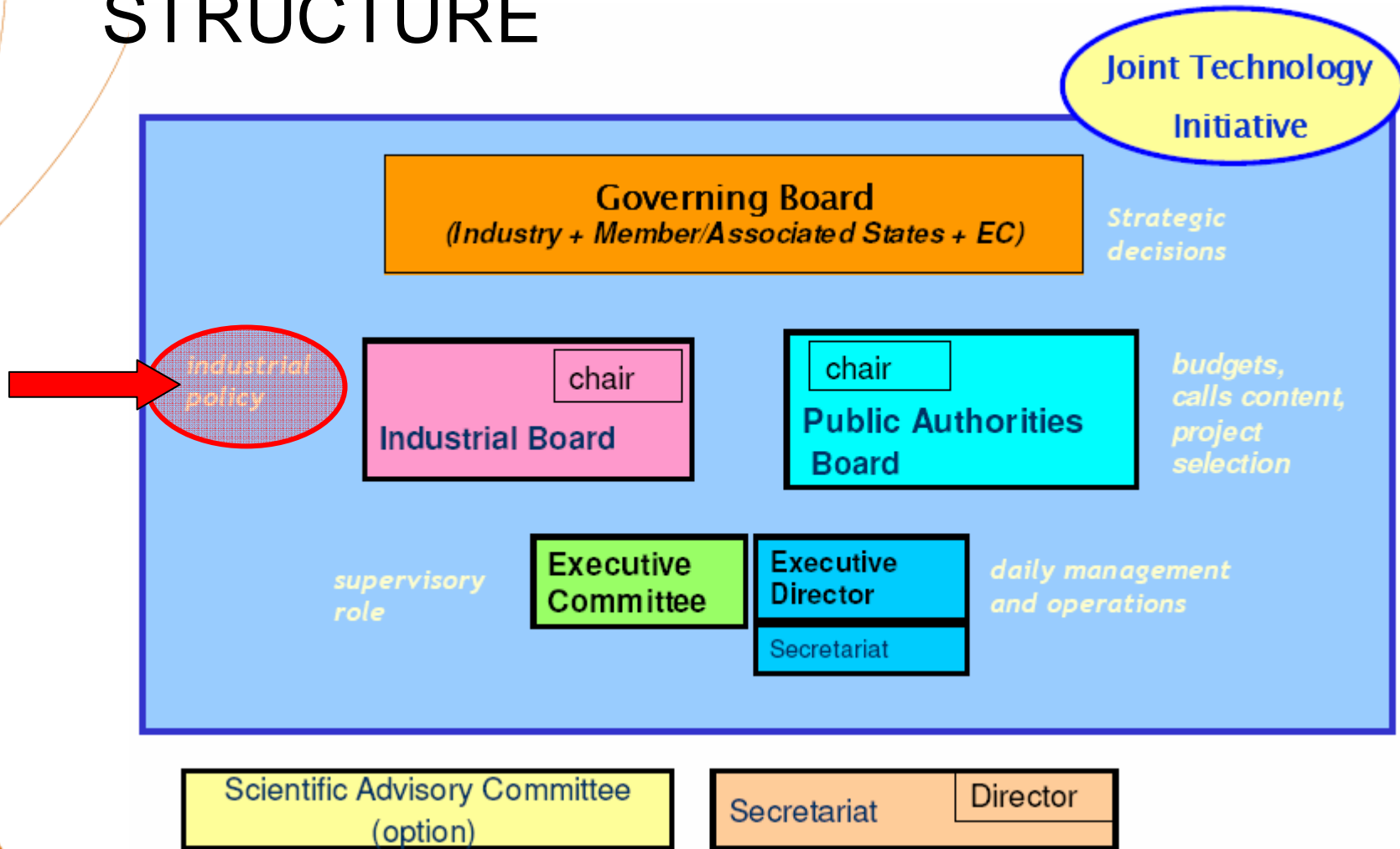
Financing Embedded Systems R&D



JTI OPERATIONS : Joint Undertaking (JU)

- **Operations combine best of FP and EUREKA worlds**
 - Annual calls for proposals
 - Common processes, unified among participating countries
 - Built-in harmonisation & synchronisation of national funding decisions
 - Contracting & processing of cost claims at national level
- **Governance principles**
 - Transparency & openness in participation & operations
 - **Industry-led public-private partnership**
 - Public Authorities decide when public money is involved
- **Legal structure: Joint Undertaking based on Art. 171 EU Treaty**
 - To receive and manage funds from EC, industry and possibly other sources
 - To guarantee agreed JTI processes, as basis for EC and national decisions

STRUCTURE



Agenda

- ARTEMIS JTI
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ARTEMIS Industrial Association

- **ARTEMISIA**

- *Wife of King Mausolus of Halicarnassos, for whom she had the Mausoleum built in 353 BC as one of the 7 Wonders of the World*
- *Family of aromatic plants*
- *....and now the ARTEMIS Industrial Association*

- **Legal entity**

- *Association under Dutch law (Eindhoven)*
- *Articles of association and Supplementary A.*

- **Dual purposes**

- *Incorporating ARTEMIS ETP activities*
- *Representing R&D actors in ARTEMIS JTI*



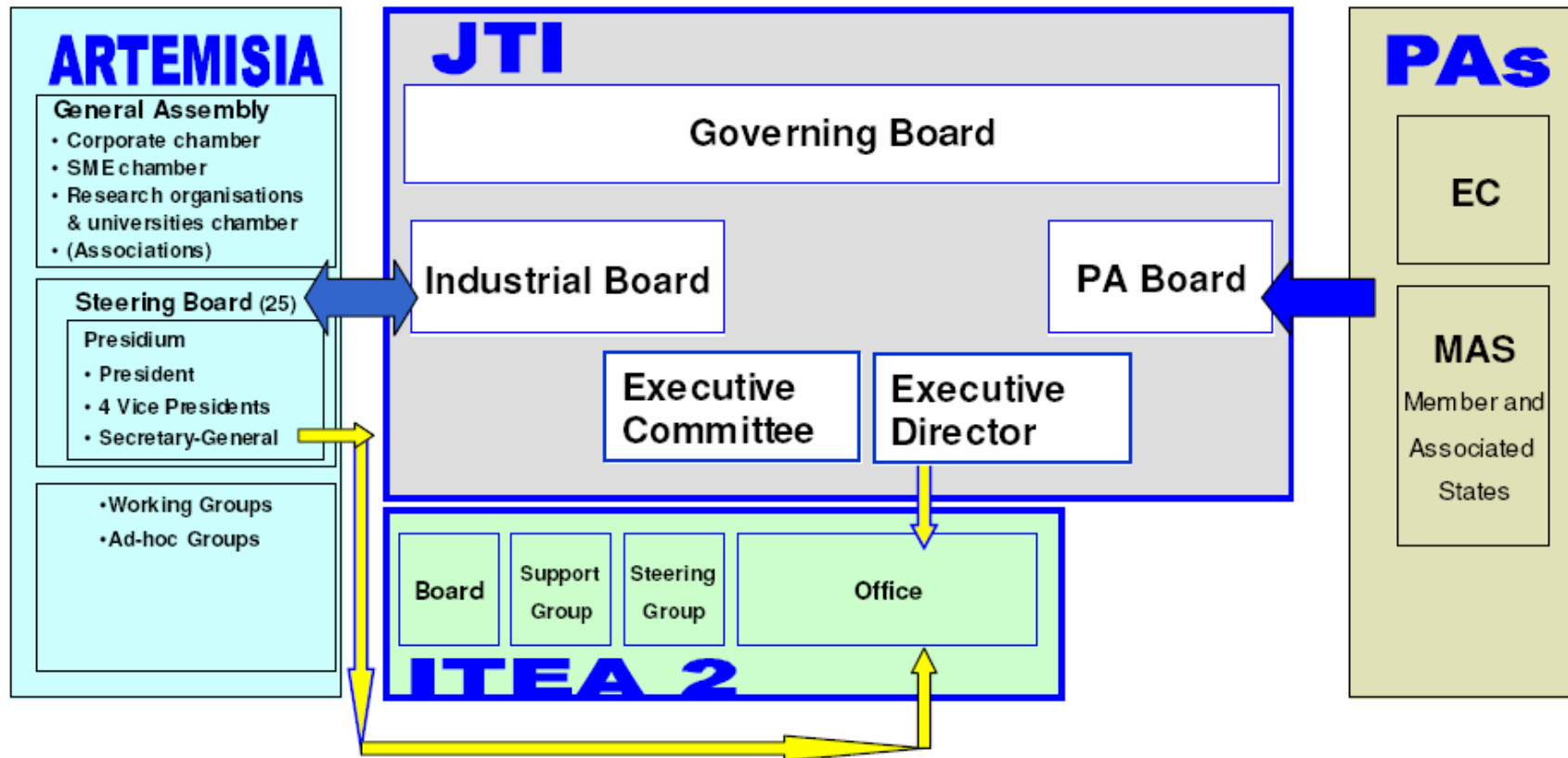
ARTEMISIA and ITEA2

- Position JTI (with top-up) in addition to “regular” ITEA 2 (without top-up)
 - Differentiate in content/scope of Calls, depending on budgets
- Let ITEA 2 integrate with JTI, once successful
- Let ITEA 2 Office operate Call process etc. for JTI
 - Use similar processes for Calls, proposal evaluation & selection
- Invite ITEA 2 Board members to join ARTEMISIA and opt for Board seats
- Discuss scope between ITEA 2, MEDEA+, ARTEMIS, ENIAC
 - Make use of temporary co-existence of JTIs and ITEA/MEDEA+
- Let ITEA 2 Office provide support services to ARTEMISIA



INFORMATION TECHNOLOGY FOR EUROPEAN ADVANCEMENT

Governance structure



ARTEMISIA status

- Commitment/support to JTI scheme confirmed by **13 countries**
- **Strong support from ITEA/MEDEA** Public Authorities (Directors)
- Detailed **JTI processes** under discussion
- **ARTEMISIA association** in place
- **Philips** Electronics Nederland B.V., **STMicroelectronics** N.V., **Thales** S.A., **Nokia** Corporation and **DaimlerChrysler** AG, acting as the five Founding Fathers of Artemisia
- Approach taken over by ENIAC and MEDEA for **JTI Nanoelectronics**
- Paper on ICT JTIs in preparation of **EUREKA Ministerial Conference**
- **JTI Council Regulation** being drafted by European Commission

ARTEMISIA approach

- Combines **private, national and EU** resources
 - To pioneer innovative funding scheme for transnational R&D
- Leverages **national research budgets**
 - As stipulated by European Council, March 2005
- **Makes ERA concrete** for embedded systems
- Rallies fragmented RTD efforts round **common SRA**
- Achieves **closer cooperation between FP and EUREKA**
 - As requested by Eureka Ministers and Competitiveness Council, 2004
- **Builds on successes of ITEA and MEDEA+**
- Improves **efficiency and effectiveness** for all stakeholders

ARTEMISIA MEMBERSHIP

Membership is equally open to SMEs (Members A), Public Research Organization (Members B) and Corporate members (Members C).

Individuals who are active in the field of embedded systems or legal persons that maintain an organization of enterprises and/or Public Research Organizations that are active in the field of embedded systems can apply for a position of Associate.

FORMATION OF THE ASSOCIATION ARTEMISIA

On * two thousand and six, there appeared before me, *Meester Petra Maria de Jong*, civil-law notary of Eindhoven:

1. * for the purposes of this matter acting as attorney authorized in writing by and as such representing:
the private company with limited liability **Philips Electronics Nederland B.V.**, whose registered office is situated at Eindhoven, with the address (5621 JG) Eindhoven, Boschdijk 525, with Ministry of Justice number B.V. 48940, entered in the Commercial Register under number 17008551 ("PEN");
2. *, for the purposes of this matter acting as attorney authorized in writing by and as such representing:
 - a. the public limited liability company under Dutch law **STMicroelectronics N.V.**, whose registered office is situated in Amsterdam, with the address (1118 BH) Amsterdam Airport, Schiphol Boulevard 265, entered in the Commercial Register under number 33194537;
 - b. the public limited liability company under French law **Thales S.A.**, whose registered office is situated in Neuilly-sur-Seine, France, with the address (F-92200), Neuilly-sur-Seine, France 45 Rue de Villiers, entered in the Commercial Register of Nanterre, France, under number 552 059 024 ;
 - c. the public limited liability company under Finnish law **Nokia Corporation**, whose registered office is situated in Espoo, Finland, with the address (02150) Espoo, Finland, Keilalahdentie 4, entered in the Commercial Register under number 0112038-9;
 - d. the public limited liability company under German law **DaimlerChrysler AG**, whose registered office is situated in Stuttgart, Germany, with the address (D-70322) Stuttgart, Germany, Mercedesstrasse 136, entered in the Commercial Register of Stuttgart under number HRB 19360.

ARTEMISIA SUPPLEMENTARY AGREEMENT

This Artemisia Supplementary Agreement (the "Agreement") is made on the 3rd day of November 2006 (the "Effective Date")

between

1. the private limited company **Philips Electronics Nederland B.V.**, with registered office at Boschdijk 525, 5621 JG Eindhoven, with Ministry of Justice number B.V. 48940, entered in the commercial register under number 17008551 ("Philips");
2. the public limited company **STMicroelectronics N.V.**, with registered office at Schiphol Boulevard 265, 1118 BH Amsterdam Airport, entered in the commercial register under number 33194537;
3. **Thales**, a French Société Anonyme having its registered headquarters 45, rue de Villiers-92200 Neuilly-sur-Seine (France) and registered at the Trade and Companies Register of Nanterre under n° 552 059 024;
4. **Nokia Corporation**, a public limited company established in Finland with its registered offices at Keilalahdentie 4, 02150 Espoo, Finland, entered in the trade register under number 0112038-9;
5. **DaimlerChrysler AG**, with registered office at Mercedesstraße 136, 70322 Stuttgart, Germany, entered in the Commercial Register Stuttgart, No. HRB 19360.

all hereinafter referred to as "Initial Signing Parties"

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PROMETEO HOY

PROMETEO, Plataforma Tecnológica Española de Sistemas con Inteligencia Integrada, constituye una red de cooperación científico-tecnológica integrada por los agentes tecnológicos relevantes del área (Empresas, Universidades, Centros Tecnológicos, etc.)

PROMETEO nace con el fin último de **incrementar la competitividad** de la industria española, posicionándola entre los líderes europeos en la producción de sistemas con inteligencia integrada.

PROMETEO HOY (2)

Objetivos:

Definir un programa de trabajo u **agenda estratégica de investigación** adaptada a las necesidades y capacidades españolas, que incluya propuestas de proyectos científico-tecnológicos singulares y de carácter estratégico, así como proyectos tractores de alta prioridad, con objetivos a medio y largo plazo. Crear una **masa crítica** para generar y transferir tecnología y coordinar los esfuerzos para desarrollar la capacidad tecnológica en función de las necesidades del tejido industrial español, apoyando a la industria y agentes tecnológicos españoles en la participación y liderazgo en el **VII Programa Marco**.

PUNTOS A DEBATIR

Agenda estratégica de investigación: ¿Cómo mantenerla viva y dinámica ?

Masa crítica: ¿Cómo impulsar el crecimiento?

VII Programa Marco++: ¿Cómo adaptarnos a ARTEMISIA ? ¿Cómo coordinamos las actuaciones de los socios PROMETEO? ¿Debe PROMETEO presentarse como Associate?

La JU: ¿Cómo evitar la no-presencia industrial?

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