



From Vision to Implementation

Speaker: Fulvio Marcoz (**Finmeccanica**)

Oct. 2007



Razionale della presentazione



- ❖ Che cosa è ARTEMIS ?
- ❖ Cosa sono gli Embedded Systems ?
- ❖ ARTEMIS Strategic Research Agenda
- ❖ La Joint Technology Initiative
- ❖ ARTEMIS Joint Undertaking
- ❖ ARTEMISIA Association
- ❖ ARTEMIS JU Governance
- ❖ ARTEMISIA Members
- ❖ Road Map



What is ARTEMIS?



- ❖ The European Technology Platform on Embedded Systems :
Advanced **R**esearch & **T**echnology for **EM**bedded **I**ntelligence and **S**ystems

- ❖ An initiative of European Industry and the EC
 - DG Information Society and Media
 - Initiated by 10 of the top-25 EU companies in terms of global R&D
 - Industry, academia, SME federation, ITEA2, MEDEA+ involved
 - 24 countries + EC involved
 - Proposed as a Joint Technology Initiative (JTI)

- ❖ Aim: develop and drive joint European vision and strategy on embedded systems through a Joint Technology Initiative

Embedded Systems Applications

❖ ES's bring **intelligence and ease of use**

- To products
- For manufacturing etc...
- Additionally: energy savings, reduced costs, ...



❖ Compared to General Purpose computers, they are **demanding applications:**

- exponentially increasing complexity (design and maintenance)
- reliability,
- availability (24/7),
- safety, security,
- time critical, ...





ARTEMIS Strategic Research Agenda (SRA) and High Level Targets

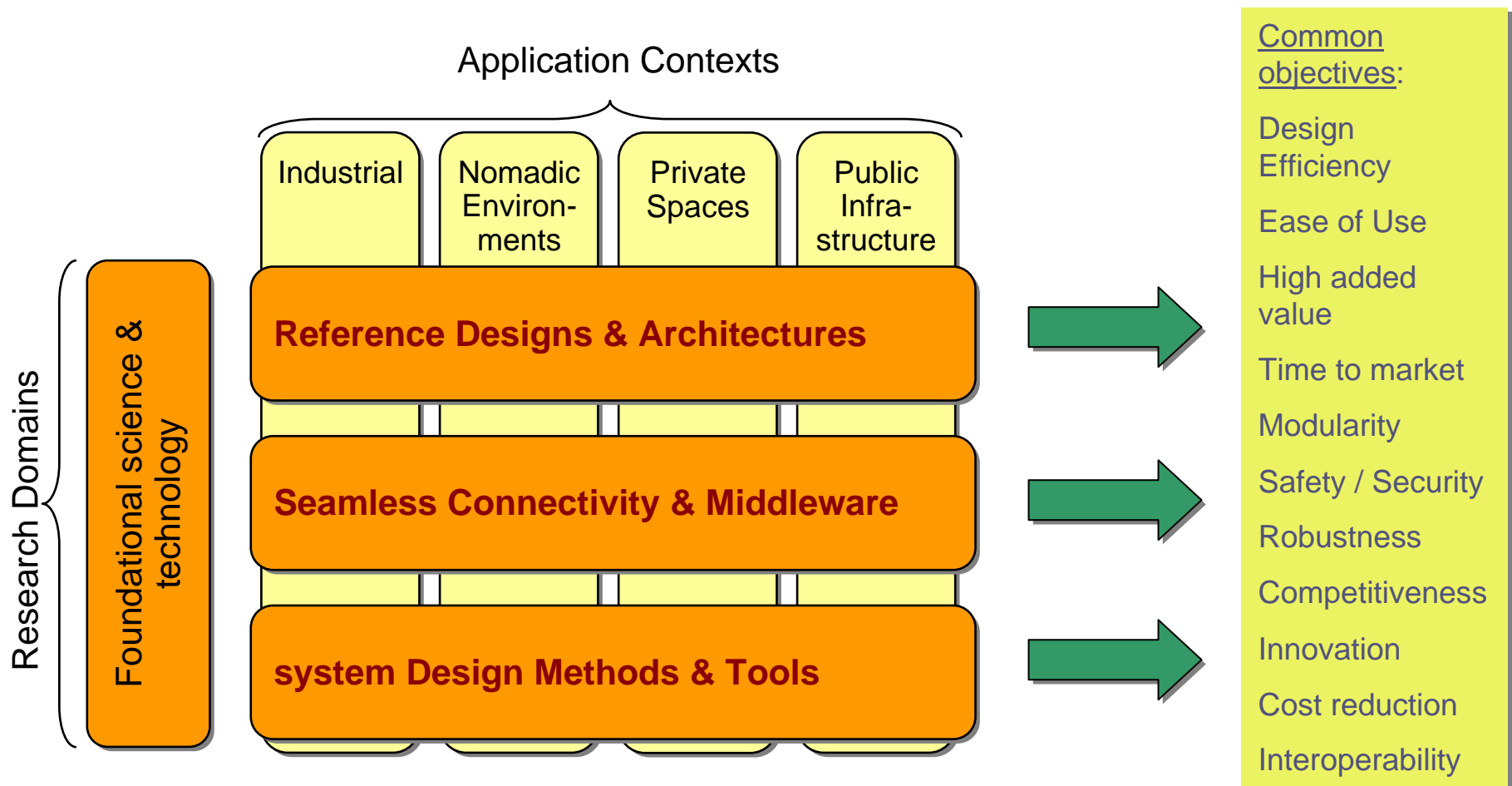
- ❖ The **ARTEMIS SRA** for Embedded systems sets the scene for efficient, pan-European, pre-competitive cooperation
- ❖ The ARTEMIS SRA defines high level targets to be attained by 2016, such as:
 - A complexity increase of 100% with 20% effort reduction
 - Cross-sectorial reusability of Embedded Systems devices for e.g. automotive, aerospace, manufacturing, ...
 - ARTEMIS will be instrumental in achieving cross-domain connectivity
 - Twice as many European SMEs will be engaged in the Embedded System supply chain



The ARTEMIS Strategic Research Agenda Vision



❖ ARTEMIS envisages **cross-application** solutions





Implementing ARTEMIS as a Joint Technology Initiative (JTI)

- ❖ ARTEMIS – A Joint Technology Initiative, to combine the best of FP and EUREKA worlds
 - Common evaluation/monitoring processes among participating countries
 - Harmonised & synchronised national funding

- ❖ JTI will have a Legal structure: a **Joint Undertaking (“JU”)**
 - based on Art. 171 of the EU Treaty
 - To guarantee agreed JTI processes, as basis for EC and national decisions, e.g.:
 - to launch Project Calls, evaluate proposals, etc...
 - to receive and manage funds from EC, industry and possibly other sources
 - Governance principles
 - Transparency & openness in participation & operations
 - Industry-led public-private partnership, Public Authorities decide when public money is involved

- ❖ **ARTEMIS JU** to launch in 2007

- ❖ R&D actors typically represented by a (not-for-profit) Association
 - E.G. the “**ARTEMISIA Association**” for the ARTEMIS JU



ARTEMIS Joint Undertaking is now in construction

- ❖ **ARTEMIS Joint Undertaking** will be the legal embodiment of the ARTEMIS Joint Technology Initiative
 - Achieve world leadership in ES technologies
 - Address societal scale/industry wide fundamental challenges
 - These are reflected in the numerical targets listed in ARTEMIS Strategic Research Agenda

- ❖ Reach critical mass through a **Public-Private-Partnership (PPP)** R&D programme (about 2.7 BEuro's)



ARTEMISIA Association



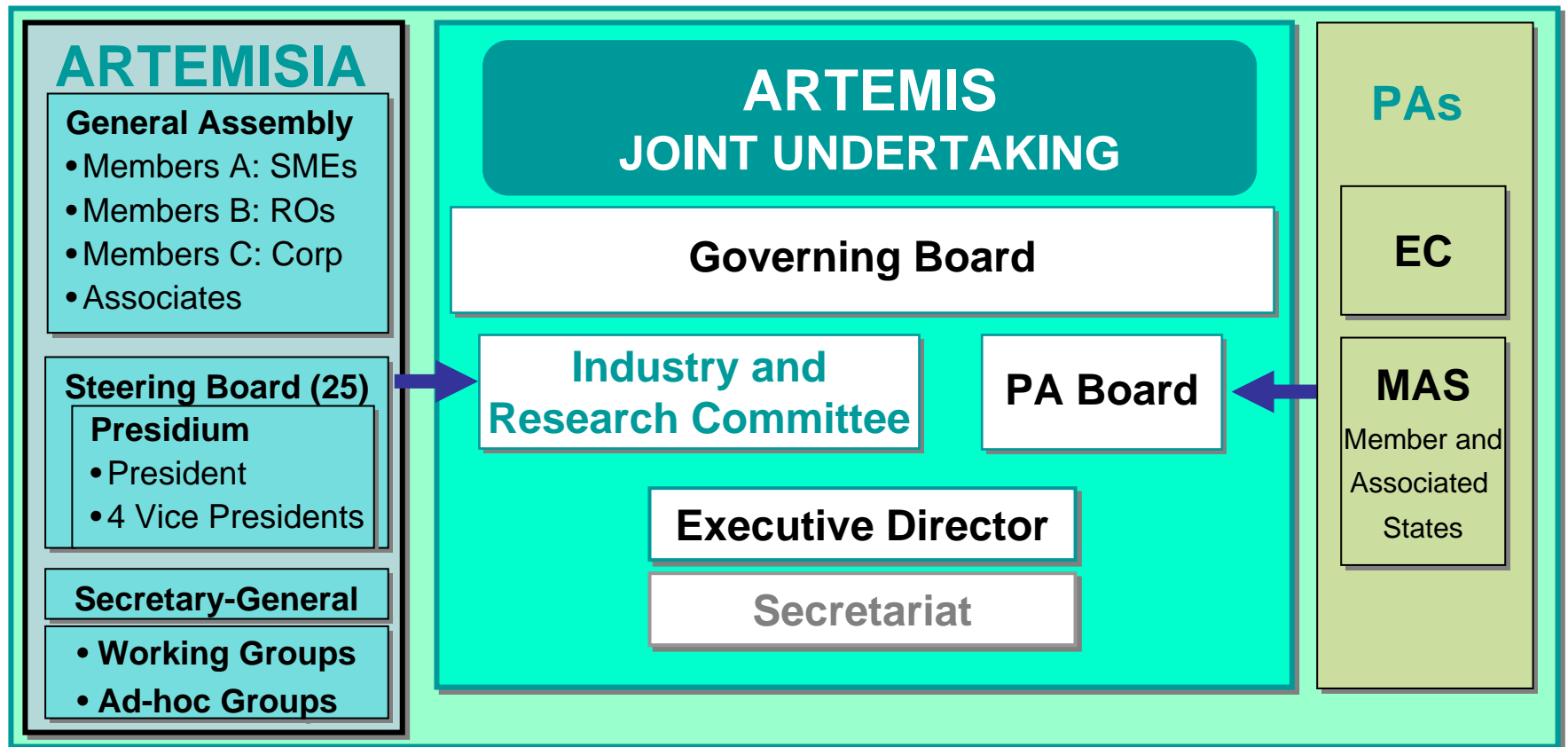
- ❖ **The ARTEMISIA Association was established on 17th Jan 2007, accepting members now**
 - www.artemisia-association.org for information on joining ARTEMISIA

- ❖ **Two main goals:**
 - **To manage and maintain the ARTEMIS SRA**
 - Takes over the function and day-to-day operation of the ARTEMIS ETP
 - Provide proposals to the JU for the Research Agenda
 - **To represent the R&D actors in the ARTEMIS JU**
 - Industrial corporations
 - SMEs
 - Research Institutes and Universities
 - Other parties with vested interest in ES R&D



ARTEMIS JU structure

Members of ARTEMISIA Steering Board are also members of the Industry and Research Committee





ARTEMISIA Corporate Members

- ❖ Elektrobit Group, Hellenic Aerospace Industry, Rockwell Collins France, Iskra Sistemi, Technology Centre Hermia,
- ❖ Telefónica Investigación y Desarrollo, S.A Unipersonal, Telelogic , ABB, Acciona Infraestructuras , AIRBUS, AVL List,
- ❖ Dassault Aviation, Dassault Systems, EADS Deutschland, Finmeccanica, Gemalto, Honeywell Aerospace,
- ❖ Infineon Technologies, Israel Aerospace Industries, KONE, European Microsoft Innovation Center,
- ❖ Mondragon (MCC), Robert Bosch, SAFRAN, Siemens, Comau, ERICSSON,
- ❖ Fiat Research Center, NXP, Schneider Electric, DaimlerChrysler, NOKIA, Philips Electronics, STMicroelectronics, Thales
- ❖ **In addition, many research organisations and SME's**

Implementation status JU

- ❖ ARTEMISIA ASSOCIATION established on January 17, 2007
- ❖ May 15, Draft Council Regulation on establishing the JU and JU Statutes, Community Body as legal structure
 - European Parliament will advise
 - Council decision expected on November 22, 2007
- ❖ ARTEMISIA has started preparing proposal for the contents of the first call based on its Research Agenda
- ❖ ARTEMIS JU is scheduled to start operating in January 2008
 - First call will be in 2008



Event Expected Date

- ❖ Creation of ARTEMISIA January 2007
- ❖ Finalization of the second version of the Articles of Association - March 2007
- ❖ Acceptation of candidate members Starting April 2007
- ❖ Election of the binding nominates May 1st – May 14th, 2007
- ❖ Election of the SB by the General Assembly during 1st ARTEMISIA GA (Berlin) June 4th, 2007
- ❖ Election of the Presidium by the SB June 4^o2007,
- ❖ Launch of the first call January 2008



Steering Board Meetings 2006

- ❖ Steering Board meeting, February 16th 2006
- ❖ Steering Board Meeting, March 20th 2006
- ❖ Steering Board Meeting, May 22nd, 2006, GRAZ, Austria
- ❖ Joint Steering Board/ Mirror Group Meeting, May 23rd, 2006, Graz, Austria
- ❖ Steering Board meeting, September 21st, 2006
- ❖ Joint Steering Board/ Mirror Group meeting, September 21st, 2006
- ❖ Steering Board Final Meeting, November 20, 2006