

ARTIST2

Network of Excellence on Embedded Systems Design
September 2004 – August 2008

Joseph Sifakis, Bruno Bouyssounouse
Verimag Laboratory

History

ARTIST - FP5 Accompanying Measure (2002-2005):

- Coordinate the R&D effort in the area of Advanced Real-time Systems
- Improve awareness of academics and industry in the area
- Define innovative and relevant work directions

Achieved through activities along 3 axes:

- Roadmaps for selected actions:
(Hard Real Time, Component-based Design,
Adaptive Real Time, Execution Platforms)
- International Collaboration
- Education

Information about these results is publicly available:

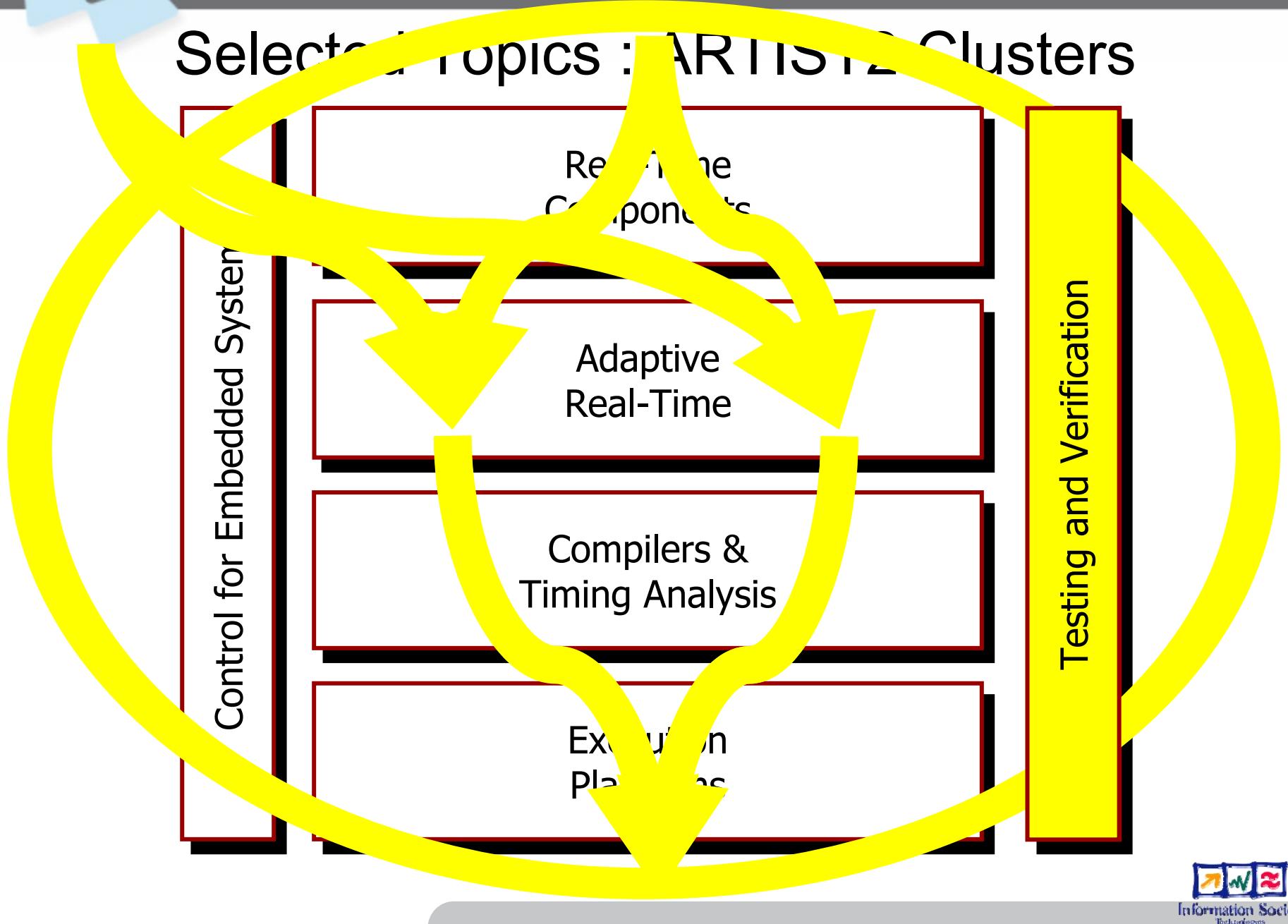
<http://www.artist-embedded.org/Roadmaps/>

Objectives

Reinforce and strengthen scientific and technological excellence in Embedded Systems Design:

- The NoE will act as a Virtual Center of Excellence
- **Two levels** of integration
to create critical mass from selected European teams
 - **Strong integration** within selected topics
by assembling the best European teams,
to advance the state of the art in the topic.
 - **Integration between topics**
to achieve the multi-disciplinary excellence and skills required
for the development of future embedded technologies.
- Integration will be around a Joint Programme of Activities

Selective Topics : ARTIST2 Clusters



	Short Name	Full Name and Country	Key researchers
1	CDC	Caisse des Dépôts et Consignations (France)	None
2	UJF/ Verimag	University Joseph Fourier / Verimag (France)	Paul Caspi, Susanne Graf, Nicolas Halbwachs, Yassine Lakhnech, Oded Maler, Joseph Sifakis
3	Aachen	RWTH Aachen (Germany)	Rainer Leupers
4	Aalborg	BRICS – Aalborg University (Denmark)	Kim Larsen, Anders Ravn
5	AbsInt	AbsInt Angewandte Informatik GmbH (Germany)	Christian Ferdinand
6	Aveiro	University of Aveiro (Portugal)	Luis Almeida
7	Cantabria	Universidad de Cantabria (Spain)	Michael Gonzalez Harbour
8	CEA	Commissariat à l'Énergie Atomique – Laboratoire LIST (France)	François Terrier
9	CFV	Centre Fédéré en Vérification, Université de Liège (Belgium)	Pierre Wolper
10	Czech TU	Czech Technical University (Czech Republic)	Vladimir Kucera
11	Dortmund	Dortmund University (Germany)	Peter Marwedel
12	DTU	Technical University of Denmark (Denmark)	Jan Madsen
13	ETHZ	Swiss Federal Institute of Technology – Zurich (Switzerland)	Lothar Thiele, Manfred Morari
14	FTR&D	France Telecom R&D	Pierre Combes, Kathleen Milsted
15	INRIA	Institut National de Recherche en Informatique et Automatique (France)	Albert Benveniste, Benoit Caillaud, Alain Girault, Thierry Jéron, Jean-Marc Jézéquel, Paul Le Guernic, Eric Rutten, Yves Sorel, Robert de Simone
16	KTH	Royal Institute of Technology (Sweden)	Martin Törngren
17	Linköping	Linköping University (Sweden)	Petru Eles
18	LSV / CNRS	Centre National de la Recherche Scientifique / Laboratoire LSV (France)	Michel Bidoit, Hubert Comon, Philippe Schnoebelen

Core Partner	Short Name	Full Name and Country	Key scientists
19	Lund	Lund University (Sweden)	Karl-Erik Årzén
20	Mälardalen	University of Mälardalen (Sweden)	Björn Lisper
21	OFFIS	Kuratorium OFFIS e. V. (Germany)	Werner Damm, Bernhard Josko
22	PARADES	PARADES EEIG (Italy)	Alberto Sangiovanni Vincentelli
24	UP Madrid	Universidad Politecnica de Madrid (Spain)	Juan de la Puente
25	Saarland	Saarland University	Reinhard Wilhelm
26	STM	ST Microelectronics – Central R&D (France)	Christian Bertin
27	Eindhoven	Technical University of Eindhoven (Netherlands)	Martin Rem
28	TU Vienna	Technical University of Vienna (Austria)	Hermann Kopetz, Peter Puschner, Philipp Petti
29	TUBS	Technical University Braunschweig (Germany)	Rolf Ernst
30	Twente	University of Twente (Netherlands)	Ed Brinksma
31	UoB	University of Bologna (Italy)	Luca Benini
32	Uppsala	Uppsala University (Sweden)	Bengt Jonsson
33	UPVLC	Universidad Polytechnica de Valencia (Spain)	Alfons Crespi
34	York	University of York (UK)	Guillem Bernat, Alan Burns, Iain Bate, Andy Wellings
35	Porto	Polytechnic of Porto	Eduardo Tovar
36	EPFL	Ecole Polytechnique Fédérale de Lausanne	Tom Henzinger
37	Pisa	Scuola Superiore Sant'Anna (Pisa)	Giorgio Buttazzo
38	Ace	Ace	Joseph Van Vlijmen
39	Tidorum	Tidorum	Niklas Holsti
40	Kaiserslautern	University of Kaiserslautern	Gerhard Fohler

Real Time Components

Hard Real Time

Albert Benveniste – INRIA
Alberto Sangiovanni – PARADES
Paul Caspi – Verimag
Hermann Kopetz – TU Vienna
Werner Damm – OFFIS

Modeling and Components

Bengt Jonsson – Uppsala
François Terrier – CEA/LIST
Jean-Marc Jezequel – INRIA
Susanne Graf – Verimag
Tom Henzinger - EPFL

Adaptive Real-time

Giorgio Buttazzo – Pisa
Alan Burns – University of York
Michael Gonzalez - Cantabria
Luis Almeida – Aveiro
Gerhard Fohler – Kaiserslautern
Juan de la Puente – Polytechnic de Madrid

Testing & Verification

Kim Larsen - Aalborg/ CISS
Ed Brinksma – Twente/Eindhoven
Pierre Wolper – Centre Fédéré de Verification
Michel Bidoit - LSV
Thierry Jeron - INRIA

Control for Embedded

Karl-Erik Arzen – Lund
Martin Torngren – KTH
Alfons Crespo – UP Valencia
Vladimir Kucera - Czech TU

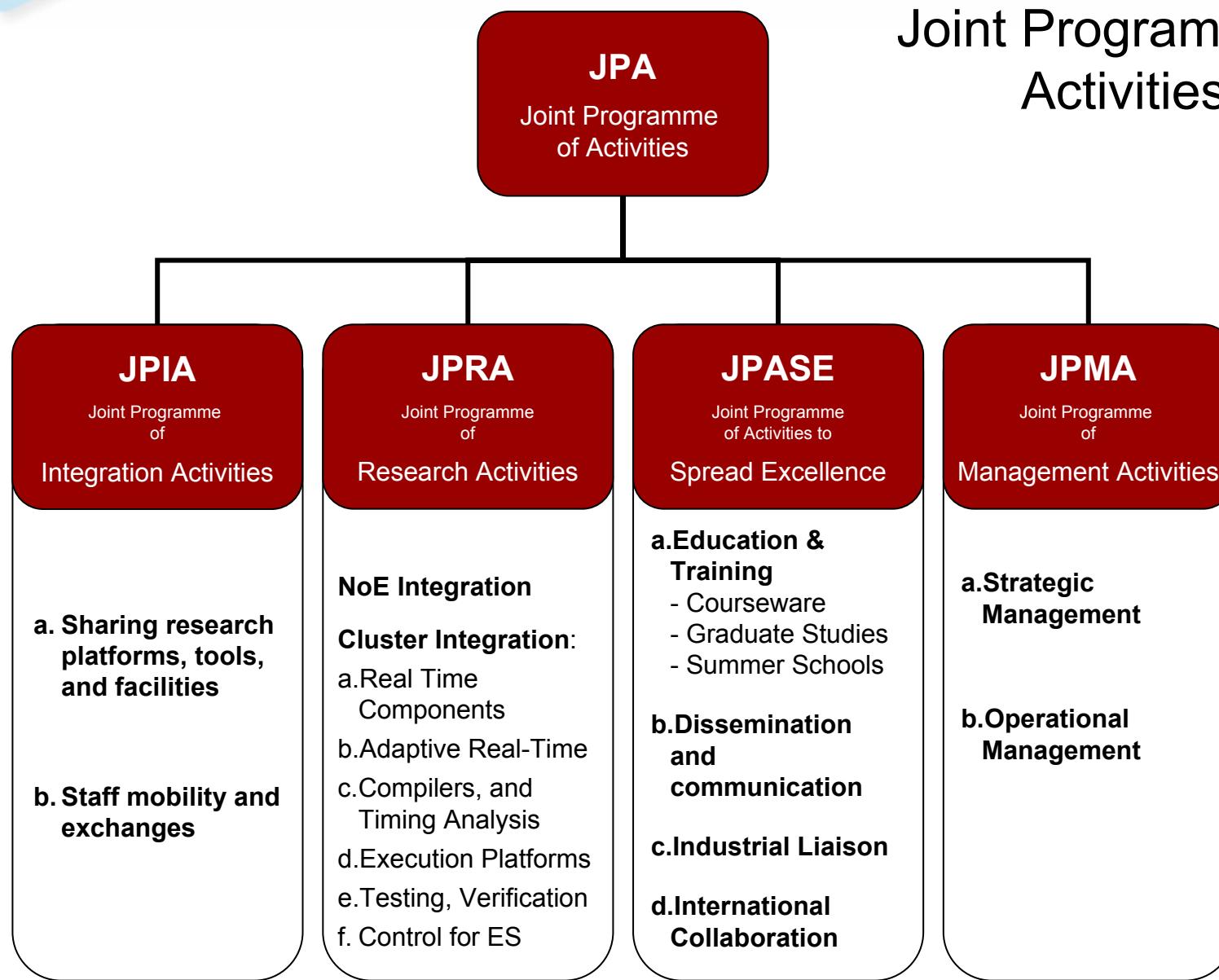
Compilers and Timing Analysis

Reinhard Wilhelm - Saarland
Rainer Leupers - Aachen
Christian Bertin – ST Microelectronics
Christian Ferdinand – AbsInt
Peter Marwedel - Dortmund
Puschner, Krall – TU Vienna
Bjorn Lisper –Maalardalen
Guillem Bernat – University of York
Joseph van Vlijmen – Ace
Niklas Holsti - Tidorum

Execution Platforms

Lothar Thiele – ETH Zurich
Jan Madsen –DTU (TU Denmark)
Luca Benini – UoB
Petru Eles – ESLAB/Liu
Rolf Ernst – UBR
Josef Hooman - Eindhoven

Joint Programme of Activities





Affiliated Industrial Partners

Christer
Norström
Göran
Arinder



Sven
Holme
Sørensen



Dr. Michael
Winokur



Magnus
Hellring



Thomas
Thurner
Matthias
Grochmann



Roberto
Zafalon



Peter
Mårtensson



Jakob
Axelsson



Alain
Ourghanlian



Dr. Kai
Richter



Peter
Mårtensson



Johan Eker



Dominique
Potier



Philippe
Baufreton



Fabian
Wolf



Vladimir
Havlena



Magnus
Hellring





Affiliated SME Partners

Alan Moore



Dr. Monica
Donno



Joachim Stroop



Jan Lindblad



Bernard Dion



Paolo Gai



Carl von Platen



António Garrido

