

ARTIST Review

Paris, 8th Nov 2006

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Overview

- Recent Embedded Systems Projects
 - Launched from Call 5, summer 2006
- IST 2006 Event
 - Conference
 - Exhibition
 - Networking & workshops
- Framework Programme 7

Embedded Systems - results

- **Total proposals received: 136**
 - Total grant requested: €421,193,080
- **Results**
 - 50 proposals passed
 - Total grant requested €172.4M
- **Budget: €79,180,538**
 - 20 proposals retained for negotiation

Analysis of proposals

- Proposals covered the two main points of the Workprogramme:
- System Design with proposals addressing
 - model-based system design, validation and testing
 - design methods, programming models and compilation tools for reconfigurable architectures
- Networked Embedded Systems
 - middleware for wireless objects
 - scalable and self-organising platforms
- Additional issues covered
 - security and trust of embedded systems
 - tool integration
 - involvement of SMEs in the programme
 - synergies with Eureka
- Issues not adequately covered
 - support actions for international cooperation



Integrated Projects

Priority	Proposal Number	Proposal Acronym	ESR score	Total cost proposed (€)	Grant requested (€)
1	33471	SPEEDS	27	17219352	9763986
2	35143	hArtes	27	18589000	11370000
3	34116	SOCRADES	26.5	15239243	9617240
4	34963	WASP	26.5	21455775	12977775
5	34891	HYDRA	26.5	14137962	8516589
6	34630	TECOM	25.5	15964153	9992876
7	34802	AUTONOMOUS	25	14386819	8872138



Overview of Integrated Projects

- Integrated Projects in systems design
 - SPEEDS
 - embedded systems design from model-based approaches towards integrated component-based construction of complete virtual system models.
 - HARTES
 - develops a methodology and a tool-chain to support the embedded system design flow, from high level to efficient modular implementation on a reconfigurable heterogeneous system.

STREPS (1)

Rank	No.	Acronym	Inst.	Nor. score	Total cost (K€)	Req. fund	Rec. fund (K€)
1	033579	AWARE	STP	98.33	3.603	2.394	2.300
2	034026	FRESCOR	STP	98.33	4.396	2.988	2.900
3	035307	Milepost	STP	91.67	3.189	1.433	1.680
4	034869	ACOTES	STP	91.67	5.165	2.676	2.600
5	032939	MORE	STP	91.67	2.770	1.816	1.780
6	034097	EMMA	STP	90	5.181	1.661	1.600
7	033563	SMEPP	STP	88.33	5.302	3.451	2.900
8	033279	SENSE	STP	88.33	2.396	1.748	1.700

STREPS (2)

Rank	No.	Acronym	Inst.	Nor. score	Total cost* (K€)	Req. fund	Rec. fund (K€)
9	033506	ANGEL	STP	86.67	3.965	2.623	2.500
10	033709	VERTIGO	STP	86.67	3.222	2.232	2.100
11	034642	uSWN	STP	86.67	4.200	2.536	2.400
12	033661	INTEREST	STP	86.67	3.037	1.539	1.500
13	035223	GREX	STP	85	4.951	3.038	2.900
14	033511	ANDRES	STP	85	2.900	2.323	2.300
15	034904	DySCAS	STP	85	4.901	3.205	2.950

Overview of STREPs (1)

- STREPs in systems design
 - FRESCOR
 - technologies and methods for the design of real time embedded systems by providing support for contract based scheduling
 - Milepost
 - Compiler technology that can automatically learn, by employing machine learning approaches, how to best optimise programs for reconfigurable heterogeneous multi-core embedded processors
 - ACOTES
 - Address complexity and cost of programming future embedded architectures by implementing program transformation techniques in compilation tools which will enable efficient programming of low-cost, highly parallel architectures for stream-processing



Overview of STREPs (2)

- **VERTIGO**
 - Development of a systematic methodology to combine a simulation-based approach (dynamic verification) together with formal verification methods (static verification) integrated into an IP-cores and platform based design flow.
- **INTEREST**
 - Addresses the integration of different existing tools for embedded systems design, with specific focus on memory and time constraints.
- **ANDRES**
 - Seamless design flow, which provides the possibility of designing embedded hardware/software systems on a higher level of abstraction emphasising in particular the application of run-time reconfigurable architectures.





IST 2006 Event

- From 21-23rd Nov 2006
- 4,000 people expected
- Day 1
 - Policies driving Innovation
- Day 2
 - FP7 Research Objectives and Participation Rules
- Day 3
 - FP7 Enabling Activities



Day 2 - am

Session 5 : Parallel Sessions on FP7						
9.00 - 10.30	5A : The network of the future	5B : Next generation Nanoelectronics Components and Electronics Integration	5C : ICT for the Intelligent Vehicles and Mobility Services; ICT for Cooperative Systems	5D : Virtual Physiological Human	5E : Future & Emerging Technologies (Nano-scale ICT, Pervasive Adaptation, Bio-ICT convergence)	5F : FP7 ICT Work Programme
Session 6 : Parallel Sessions on FP7						
11.00 - 12.30	6A : Service and software architectures, Infrastructures and Engineering	6B : Photonic components and subsystems	6C : ICT for Environmental Management and energy efficiency	6D : Digital Libraries and Technology Enhanced Learning	6E : Future & Emerging Technologies (Complex Systems, Embodied Intelligence, ICT forever yours)	6F : How to submit a proposal?

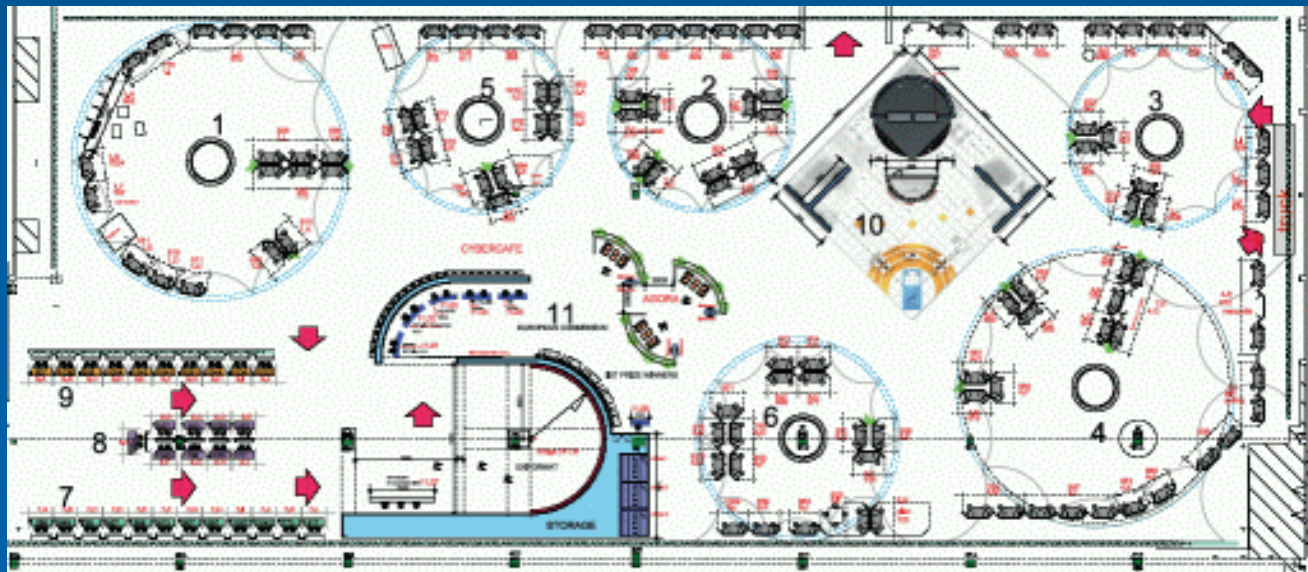


Session 7 : Parallel Sessions on FP7						
14.00 - 15.30	7A : Secure, dependable and Trusted Infrastructures	7B : Micro/Nanosystems; Organic and large area electronics and display system	7C : ICT and Ageing: Accessible and Inclusive ICT	7D : Intelligent Content and Semantics	7E : Computing Systems	7F : FP7 ICT Work Programme
	8A : Networked media	8B : Embedded Systems Design; Networked Embedded and Control Systems	8C : Personal Health systems; Advanced ICT for Risk Assessment and Patient Safety	8D : Cognitive systems, interaction, robotics	8E : New Paradigms and Experimental facilities linked to e-Infrastructures under the Capacities Programme	8F : How to submit a proposal ?



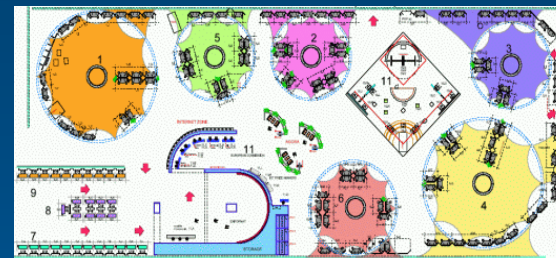
Exhibition

- Aim: showcase research results
 - 9250 square metres
 - 160 stands
 - 350 exhibitors
- 11 Zones
 - Research & technology stands
 - with demos
 - Information stands



Exhibition Overview

- **Research and development project stands:**
 - Emerging innovations and core technology
 - New media & entertainment
 - People on the move
 - Health, Safety & Security
 - Everyone's included!
 - Novel solutions for business and industry
- **Information Stands**
 - Country and regional stands
 - Framework 7 support actions and technical stands
 - Technology Platforms
 - and...
- **Finnish National Pavilion**
- **European Commission stand**



Network sessions & workshops

- **Aims**
 - Provide an open forum for exchanging views and ideas
- **Networking sessions**
 - brings together new constituencies
- **Workshop**
 - presents state-of-the art in a domain
- **Topics proposed by the research community**
- **Include R&D issues, ETPs, INCO**
 - Also non-technical subjects
- **104 sessions**
 - run in tandem with the parallel sessions





Competitions

- **Best exhibit competition**
 - open to all technology stands in the exhibition
 - all visitors get 3 “votes”
 - jury evaluation of results and selection of the best
- **Best website competition**
 - 256 websites entered
 - 22883 votes casts by 21825 people
 - 85 votes on average per website.
 - jury selection of the best
- **3 finalists for each competition**
 - overall winner for each gets a prize of €10,000
 - sponsored by Nokia
- **Feature of closing session**
 - Award of Best Information Society Practices in Finland
 - Prime Minister of Finland

