



PROJECTS APPROVED

186

TOTAL BUDGET (IN M€)

900

Systematic Paris-Region

ICT, SOFTWARE (INCLUDING OPEN-SOURCE SOFTWARE) AND COMPLEX SYSTEMS

MAIN INTERESTS

- **Technologies for designing and developing complex systems in response to specific issues** (architecture, technology heterogeneity, partial understanding of user environments, acceptability and use)
- **Generic and distribution technology for software**
- **Electronic and optoelectronic hardware technologies**

Application markets: automobile and transport, security and defense, telecommunications, ICTs and sustainable cities

400 MEMBERS

100 major companies: Airbus-EADS, Alstom Transport, Bull, Dassault Aviation, Dassault Systems, France Telecom/Orange, Renault, Thales, Safran, Gemalto, Unilog, Oberthur Card Systems, Peugeot Citroën (PSA), etc.

including 23 foreign companies: Alcatel-Lucent (USA), EADS (Germany), Continental (Germany), Freescale (USA), HP (USA), Johnson Controls (USA), Motorola (USA), etc.

240 SMEs: Aevix, Bertin Technologies, Ilog, Newphenix, Picogiga SAS, Resonate, Samtech, Trialog, Virtools, etc.

80 centers of excellence: CEA, Inria, CNRS, Digiteo, Ecole Polytechnique, Ecole Centrale, Supelec, etc.

15 local authorities

R&D WITHIN THE CLUSTER

50,000 RESEARCHERS

186 PROJECTS FINANCED

€360M STATE AID

€218.6M FROM THE IF ⁽¹⁾

€88.4M FROM THE NRA ⁽²⁾

NUMBER OF PATENTS FILED IN 2007
BY APPROVED PROJECTS: N/A

(1) IF: INTERMINISTERIAL FUND

(2) NRA: NATIONAL RESEARCH AGENCY

EXAMPLE PROJECT

SYSTEM@TIC

As of 2009, System@tic began deploying its technologies and solutions aiming at new market segments, in particular ICT and sustainable cities, which are central to the issues of society in the 21st century and whose development is increasingly reliant upon the expertise and *savoir-faire* of System@tic and its members. The priorities selected in this area are e-services for urban residents, design and simulation tools for construction and the city, technical management and supervision systems for construction in the city as well as environment, transport and mobility systems.

Systematic Paris-Region

CLUSTER STRENGTHS

→ **Number of employees at cluster members: 102,000**

→ **Ile-de-France is unquestionably the top region in France** and also one of the leading regions in the world for software and complex systems. It encompasses:

- 320,000 private-sector and 11,000 public-sector jobs in R&D
- 42,000 employees working in industrial research and 8,000 in academic research

→ The cluster brings together in a very small area (in Ile-de-France south-west of central Paris) **outstanding players in both science and industry, which are fundamental links in the value chain.** This strategic positioning makes it possible for the cluster to excel in all of the key technologies that are set to become central to the systems of the future.

INTERNATIONAL OUTLOOK

Strong

→ **Cooperation with foreign clusters**

- Partnership with the Aerospace Valley cluster and the German cluster SafeTrans as part of a 3-way partnership within EICOSE (European Institute for Complex and Safety Critical Embedded Systems Engineering) in the field of critical embedded systems for transport.
- Cooperation agreement with the “Innovation cluster” Point-one (Netherlands)
- Partnership with the Bavarian cluster “Bavarian Information and Communication Technology cluster” (BICC-Net)
- Partnership with Tunisian innovation cluster El Gazhala
- In addition, partnerships with international clusters concerning security and defense issues are also under development: SITC and TDS.

→ **Participation in European programs**

- The participants in the System@tic Paris-Region cluster are active contributors to many European networks, in particular with European technological platforms (Artemis, eMobility, etc.) and the Eureka (Itea[1], Medea+[2], etc.) clusters. They are also strongly represented in the European Commission’s research programs (FP7).

• **Involvement in international projects in 2009/2010**

- SME initiative in Boston / 17–20 November 2009: System@tic offered SMEs the exclusive opportunity to join networks of academic and business partners established on the US East Coast (MIT, MOITI, CCE, etc.) to share technologies and expertise with foreign partners in their sectors.
- SME initiative in Beijing / 13–17 December 2009: System@tic opened the doors of its Chinese academic and business partner networks (Tsinghua, Zhongguancun, CCIFC, etc.) to SMEs in order to share technologies and expertise with foreign employees in their sectors.
- Embedded World 2010 / 2–4 March 2010 in Nuremberg: System@tic offers SMEs the opportunity to take part in Embedded World 2010, the global embedded system trade fair, held at a cluster village.

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PROJECTS

PROJECT	STRATEGIC PRIORITIES	EXAMPLE COLLABORATIVE R&D PROJECTS
LOV (Automobile and transports)	Architectures, operating safety, Set software tool method, diagnostics, 15-year outlook for user interfaces, algorithms/data fusion for geo-location and vision.	<i>Logiciels d'observation des vulnérables</i> : "Observation Software for Vulnerable Road Users". This project promises to improve road safety by developing reliable, safe software for observing vulnerable road users (pedestrians, cyclists), implanted in hardware that can be quickly installed on vehicles.
SQUALE (Open-source software)	Technology and tools for open-source software development, migration and administration.	Software Quality Enhancement: Squale is a gateway used to measure the quality of software in order to determine whether its foundations are sound and whether it will hold up to future developments, whether initially foreseen or unforeseen. Available as open content, Squale freely allows its users to monitor and test the quality of their applications over time.
IOLS (Systems design and development tools)	Improving simulation chain efficiency and productivity, extensive use of simulation, software system design, simulation of product production, life cycle and operating condition maintenance.	The IOLS project is one of the founding projects of the Systematic cluster. It arose from the shared desire of some twenty publishers, R&D laboratories and industrial players such as Thales or Dassault aviation and focuses on digital simulation.
FC2 (Security and Defense)	Security of goods and individuals, security of information systems.	The purpose of FC2 is to create a platform demonstrating that it is possible to provide new electronic services that are both easy to use and comply with confidentiality rules. The idea is ultimately to move to a fully fledged digital economy. This means that users will be able to identify themselves, via the internet, to gain access to government (voter registration), consumer (buying a train ticket) or banking (opening an account online, from A to Z) services.
URC (Telecommunications)	Very high-speed internet and transformation of data transport networks, wireless and mobility, services and service infrastructures.	<i>Urbanisme des radio-communications</i> : the URC project aims to optimize radiofrequency allocation and use in order to provide a quality response to growing demand. For instance, by re-using a radio-frequency which, at a given point in time, is detected as being unused or by arbitrating between radiofrequencies used by several systems at once, according to user demand.

Contact

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