



Information and communication technologies

The scope of the ICT sector is enormous, encompassing electronics, IT and telecommunications, hardware, software and services. France boasts several global innovation clusters specializing in micro- and nano-electronics, software development and telecommunications technology, and hence offers first-rate business opportunities for foreign companies.

A SOLID INDUSTRIAL BASE

In 2008, the French ICT market accounted for 16% of the total European market. It generated a turnover of €113.2 billion, which can be broken down as follows: telecommunications (€55.3 billion), IT (€48.3 billion) and consumer electronics (€9.5 billion).

Thanks to a large pool of skilled labor, France excels in developing electronic components (56,000 employees), communication equipment (50,000 employees) and telecommunication services (135,000 employees), and is ranked highly among leading countries in Europe. The following French companies are international leaders in their respective sectors: Alcatel-Lucent (telecoms and network equipment manufacturer), France Telecom (telecommunications), Gemalto (global leader in the production and marketing of smart cards), Vivendi (communication and entertainment), Cap Gemini and Atos Origin (IT consulting).

OUTSTANDING SKILLS IN SOFTWARE DEVELOPMENT AND IT SERVICES

This sector employs around 350,000 people in France⁽³⁾. The main fields of excellence include CAD/CAM software (Lectra Systèmes), machine translation technologies (SYSTRAN is the world number one), decision-making aids (Eurobios, Harvest), integrated business packages (Proginov), human resources packages (Meta4), consumer software (Avanquest Software), computer-aided design and 3D design (Dassault Systèmes), as well as special effects and video games (Activision-Blizzard, Ubisoft, Atari).

KEY FIGURES 2008

TURNOVER:
€113.2 billion ⁽¹⁾

16% of the European market ⁽¹⁾

WORKFORCE:
1,335,000 employees ⁽²⁾

⁽¹⁾ European Information Technology Observatory (EITO)

⁽²⁾ INSEE (French National Institute for Statistics and Economic Studies)

THEY CHOSE FRANCE

Microsoft

The American giant **Microsoft** recently set up an R&D center dedicated to the search engine "Live Search", in Issy-les-Moulineaux (just outside Paris). The center employs around one hundred researchers.

Huawei Technologies Co.

Huawei Technologies Co.: This Chinese telecoms supplier first invested in France in 2003, and today employs nearly 150 employees in France. A cutting-edge employee training center, including laboratories and classrooms, has been opened in Suresnes (Ile-de-France), along with two new R&D centers elsewhere in the country. Huawei is due to recruit a further 350 people in the next 3 to 5 years, tripling the size of the group's workforce in France.

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LARGE POOL OF QUALIFIED WORKERS

→ FRANCE RANKED 2nd IN THE WORLD FOR THE PROPORTION OF SCIENCE AND TECHNOLOGY GRADUATES IN THE ACTIVE POPULATION⁽⁴⁾

France is ranked second in the world for the proportion of science and technology graduates in the active population⁴. It boasts a highly reputed network of higher education establishments specializing in telecommunications: Supelec, Télécom ParisTech and the *Institut National des Télécommunications*. Finally, the Gobelins School of Visual Communication in Paris, SupInfoCom in Valenciennes and the interactive media school ENJMIN in Angouleme train some of the best 3D imaging and animation talent in the world.

GREAT CAPACITY FOR INNOVATION

France has for example 45,000 telecommunications researchers, working primarily at France Telecom and in major public-sector laboratories: GET (Group of Telecommunications Schools), INRIA (French National Institute for Research in Computer Science and Control) and CNRS (French National Center for Scientific Research).

The ICT sector accounts for almost 27% of corporate R&D expenditure in France.

FOREIGN COMPANIES INVESTING HEAVILY IN R&D

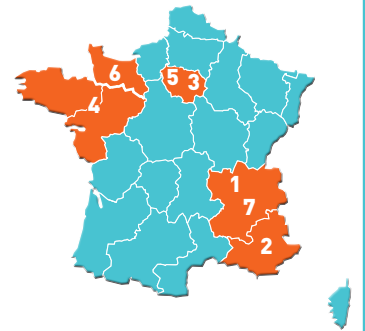
Most top international companies already have major operations in France, such as Motorola and LG Electronics in the telecommunications equipment sector, and Atmel, IBM and NXP in the electronic components sector.

Foreign investors are very active in the R&D sector, often in partnership with French organizations. For example Microsoft has established a scientific computations laboratory with INRIA, and Hitachi has opened a European R&D laboratory specializing in mobile telecommunications. In 1967, Motorola set up a major telecommunications center of excellence in Toulouse (GSM, GPRS, UMTS). LG Electronics has a mobile telephone research center in Paris, while Yahoo opened its biggest European R&D center in Grenoble in 2008.

(3) *Syntec Informatique* (French association of software and IT services companies)

(4) (Per 100,000 employees aged between 25 and 34) OECD, 2008

7 SPECIALIST INNOVATION CLUSTERS



1. Minalogic

Rhône-Alpes. Minalogic fosters innovation in the development and production of intelligent miniaturized products and services for industry (micro-nanotechnologies and embedded software intelligence).

www.minalogic.org

2. Solutions Communicantes Sécurisées

Provence-Alpes-Côte-d'Azur. SCS focuses on the design and development of new solutions - integrating components, software, networks and systems - for safe and reliable data exchange and processing.

www.pole-scs.org

3. SYSTEM@TIC

Ile-de-France. System@tic specializes in ICT and encompasses complex systems and generic software, electronics and optoelectronics technologies.

www.systematic-paris-region.org

4. Images et réseaux

Bretagne (Brittany) & Pays de la Loire. Images et Réseaux specializes in communication networks and new digital image technologies.

www.images-et-reseaux.com

5. Cap Digital

Ile-de-France. Cap Digital specializes in the creation, distribution and multimedia exchange of digital content.

www.capdigital.com

6. TES (Secure Electronic Transactions)

Basse-Normandie. TES focuses on secure data exchange, digital identity and financial transactions.

www.pole-tes.com

7. Imaginove

Rhône-Alpes. Imaginove seeks to develop synergies between the different branches of the moving image sector (video games, cinema, audiovisual, animation and multimedia).

www.imaginove.fr