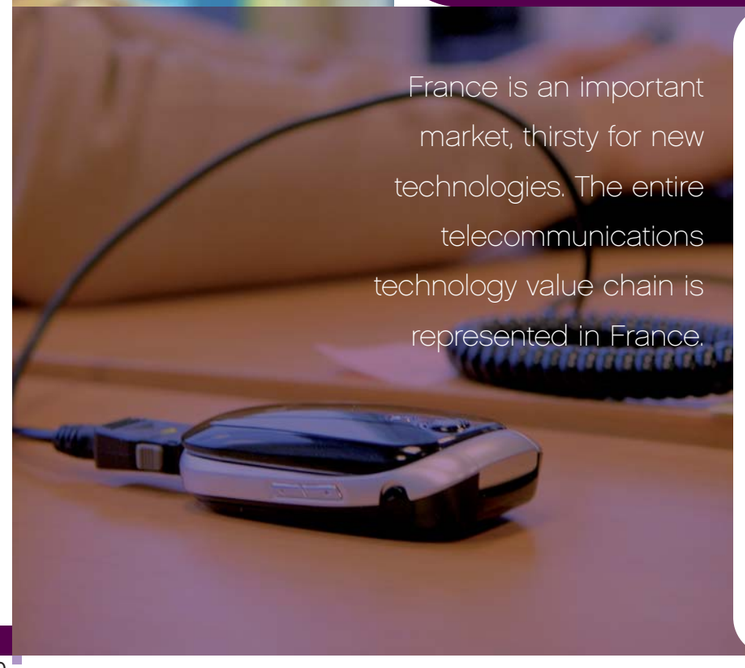
Chapter III

Attractiveness of France

Telecom-munications



Sector champions and recognised leaders (STMicroelectronics, France Telecom, Alcatel, Thomson Multimedia, Gemplus, ASK, VU etc) as well as dynamic start-ups have contributed to building a solid industry and to attracting a number of global players involved in R&D projects and competitiveness clusters...
5 acknowledged global competitiveness clusters ply their trade right through the telecommunications industry value chain:
– **Minalogic** at Crolles in Isère focuses on electronics and embedded chip software with the help of CEA-LETI and local expertise;
– **System@tic** in Île-de-France focuses on interconnected systems in a digital environment;
– **Solutions Communicantes Sécurisées** (SCS) in Provence-Alpes-Côte d'Azur focuses on hardware-software integration for secure and reliable information transmission, exchange and processing;
– **Images & Réseaux** [Images & Networks] in Brittany focuses on digital imaging technologies and fixed and mobile digital content distribution networks;
– **Image, Multimédia et vie Numérique** [Image, Multimedia and Digital life] in Ile-de-France;
And several other international competitiveness clusters equally nourish innovations in the sector, for example embedded electronics in Midi-Pyrénées, to name but one.

5 global or potentially-global competitiveness clusters

European No 1 for unbundling

France Telecom R&D, leading European R&D centre

ENGINEERS WITH ACKNOWLEDGED EXPERTISE

The number of graduate and post-graduate engineers in science and technology in this sector places France in second in the field within Europe. The reputation of institutions such as Supélec, ENST Paris, ENST Brittany or the INT Telecommunications School reaches right across French and European borders.

FRANCE, DEDICATED TO R&D

Today the quality of French R&D in ITC is acknowledged worldwide: No fewer than 45,000 engineers and technicians are dedicated to the development of the telecommunications industry in public and private research; France was a major contributor to key innovations such as ATM, GSM, UMTS and the worldwide web itself. The Group of Telecommunications Schools (GET) worked on the invention of the turbocodes which has opened up a new research stream in signal processing for multiple applications including mobile telephony.
France Telecom R&D is the leading European research centre for telecommunications with 4,200 researchers and engineers. Public laboratories on an international scale such as those of GET, INRIA and even at CEA and CNRS are industry-focused to create synergies and critical mass in this global industry.

FRANCE, A CENTRE OF GRAVITY FOR ITC

France has such an infrastructure and reputation that several heavyweights from the telecommunications industry have sited their European research centres here. The US giant Motorola came to France back in 1967, locating its global excellence centre in GSM/GPRS/UMTS mobile telephony at Toulouse, followed recently by an i-mode design centre in Brittany.
Following a partnership agreement between INRIA and Eurecom, Japanese Hitachi set up an R&D centre in France to create a strong partnership focusing on 4th generation systems, IP and WI-FI technologies, etc
LG Electronics, meanwhile, established its European mobile research centre in the Paris area at the end of 2004. The Korean firm sees this centre as the base for its European market investment, which it views as essential.
British start-up CSR has just cut the ribbon on its UWB technologies design centre.

"GSM was actually invented in France. France is home to Invention and innovation and an excellent pool of well-trained engineers able to define and develop products for application worldwide. That's what Nortel came looking for and that's what Nortel found."

Jean-Luc Jezoin, Vice President, GSM/UMTS, Nortel France.