

## Geographic information: the French supply



D.R.

*"Many concrete achievements the world over already reflect French expertise, whether technological, institutional or organizational".*

Over the years, geographic information has changed considerably, mainly through the influence of the new information and communication technologies. It is a fast-growing market owing to the diversity of supply of geographic information products and their derivatives and the wealth of possible applications. There are no longer many economic sectors in which this resource does not play a part.

In France, activities related to geographic information, which are cross-cutting in nature, bring together structures varying in size, with resources and organisational capacities that may be limited. Five main stakeholder categories are involved: backbone bodies (CNIG<sup>1</sup>, Afigéo<sup>2</sup>), institutional actors (such as IGN<sup>3</sup>, the Land Registry Office or the SHOM<sup>4</sup>), state-delegated bodies (OGE<sup>5</sup>, network managers), local authorities which have an increasing role, and private actors (large companies, specialized SMEs, software editors, etc.).

To meet increasing and ever more complex demand – combining extensive sectoral knowledge and specific experience – an Export Club was created in 1999 by Afigéo. It provides companies with sector-based support and defines geographic priorities and fields of application able to strengthen the presence of French economic actors on the international front.

Many concrete achievements the world over already reflect French expertise, whether technological, institutional or organizational – knowhow embracing projects from design through to completion, which includes the training of local operators.

**Jacques Lagardère,**  
President of CNIG

### Contents

1

Geographic information: the French supply

2-5

#### Feature

Geographic information: a strategic challenge  
*The new situation regarding geographic information results from the conjunction between several major technological developments and from the creation of groups able to provide worldwide information. Owing to considerable gains in productivity, there has been no increase in the cost of access to information. But there is a real risk of a new divide between have and have-not countries.*

6-8

#### Information update

Events  
Training  
Publications

<sup>1</sup> National Council for Geographic Information (CNIG) – an interministerial, 35-member body representing the public sector (ministries, local authorities, etc.) and associating the private sector.

<sup>2</sup> French Association for Geographic Information (Afigéo).

<sup>3</sup> National Geographic Institute (IGN).

<sup>4</sup> French Hydrographic and Oceanographic Service (SHOM).

<sup>5</sup> Association of Chartered Surveyors (OGE).

## Geographic information: a strategic challenge

*The development of communication technologies and the explosion of demand are radically changing the situation as regards geographic information, and this has crucial strategic implications in terms of the ability to access data. There is a real risk of a new divide between have and have-not countries.*

**T**he new situation regarding geographic information results from the conjunction between several major technological developments and from the creation of groups able to provide worldwide information.

In the past twenty years, the generalization of data processing techniques has enabled a transition from maps to geographic data banks and terrain models. Owing to considerable gains in productivity, there has been no increase in the cost of access to information whose characteristics have little in common with those of the sixties.

With the launching of Landsat, spatial imagery has introduced new services such as frequent updating, new parameters and consistent world coverage. Spatial teledetection applications are now essential when implementing large-scale protection and monitoring policies for crops, fires, marine pollution, meteorology, etc. Through Spot, France has offered developing countries specific programmes to access this new information and build national, more or less sector-based processing capacities. Constant improvements in the resolution of digital imagery (80 cm for spatial imagery and less than 20 cm for airborne digital cameras) is helping to modify the interface with geographic information.

The explosion of GPS applications (Global Positioning System) and the decision to launch the European Galileo programme, are completing the radical change in the transport sector and that of the safety of persons and goods (real-time positioning, space-based surveillance of large fires, volcanoes, marine pollution, etc.). Firstly ship positioning systems and now train and wagon location systems (Astree) and guidance systems for road vehicles and public works vehicles, are becoming increasingly common in the Western world. The development of a new air navigation system based on spatial positioning is the subject of technical debate, mainly on safety issues.

### **National independence and the maintenance of competition**

The sale of permanent, often customized services with a high added value has replaced the sale of mass-produced maps. Access to basic geographic information under guaranteed conditions has become a major economic

challenge, central to the new technologies revolution. This information is key to production and distribution (e.g. mobile phone network management), the availability of user-oriented products (meteorology, guidance, geomarketing, etc.) and short-term trend anticipation (e.g. crop monitoring).

Recent progress in satellite imagery has enabled geographic databases and global geographic services to be built up. The emergence of private operators (e.g. the Insat Indian satellite) is opening up the market solely for the benefit of companies capable of building and maintaining such databases.

The reduction in data access costs – access to the positioning systems is currently free of charge – has given rise to an explosion of geographic information services and uses.

Many countries and operators have taken advantage of this trend. Developing countries are lagging behind

in the deployment of new services owing to the lack of local technical capacities and, above all, investments in the user sectors (c.f. box “Thirteen years of addressing in Africa”).

Technological change, although still happening fast, has not yet enabled global monopolies to be formed, because of two well-identified problems:

- the guarantee of access to reliable source materials, including in times of crisis. This presupposes highly diversified supply or the possibility of making long-term strategic agreements, or again the existence of a national autonomous system;
- the maintenance of the same business conditions for all the operators. This second problem concerns the existence of sufficient competition. This will be ensured by the presence in each operator’s sector of a number of countries offering interchangeable systems based on stable international standards. ●●●

### Thirteen years of addressing in Africa

Many cities in developing countries are undergoing escalating urban growth, characterized by the emergence of many neighbourhoods lacking in amenities. Added to which, there is a *virtually complete absence of urban landmarking*. As a result, operating urban services is often a daunting task. To overcome these difficulties, “addressing” techniques have been designed and developed. They enable a parcel or a building to be spatially referenced, which entails defining its address using a system of maps and signs showing the numbering or naming of streets and buildings. The addressing method involves the following steps:

- Prepare a full, up-to-date blueprint of the city;
- Codify all the roads until they can be named;
- Adopt a door numbering system;
- Provide signs and numbers for roads and doors;
- Make an exhaustive door-to-door survey (use, type, etc.);
- Set up tools to manage the collected information.

Addressing is more than a simple signing operation. It is the cornerstone of municipal management tool development because it improves the collection and management of urban information. It cross-references a cartography system and a database, and forms a de facto simplified geographic information system. Both types of information are of interest to many public and private operators, such as water and electricity concession companies, tax authorities, municipal service, ambulances and fire brigades, some of whom take part in the survey stage.

In Africa, the first addressing operations took place in the late 1980s, mostly supported by French Development Aid or the World Bank (WB). Today, several African capitals and large cities have undergone a two to three year addressing process, including N’Djamena (Chad), Ouagadougou and Bobo Dioulasso (Burkina Faso), Yaoundé and Douala (Cameroon), Conakry (Guinea Conakry), Bamako (Mali), Maputo (Mozambique) and Nouakchott (Mauritania). This is beginning to be generalized systematically to secondary cities in some countries such as Guinea Conakry, Mali, Mauritania, Mozambique and Senegal.

An international workshop on the subject “Addressing and urban management” was held in Paris from 27 to 30 April

1999. It was organized under the auspices of the WB and the French Ministry of Foreign Affairs (MAE) by Groupe Huit, with Isted’s aid. It brought together some forty participants: representatives of the WB and the MAE, leaders from nine countries (Benin, Burkina Faso, Cameroon, Guinea Conakry, Mali, Mauritania, Mozambique, Senegal and Togo), French GIS specialists (Municipality of Paris, the Paris Town Planning Office and IGN France International).

In May 2001, the first presentation of addressing was made at the WB annual Infrastructure Forum. A further one-day conference will be devoted to the subject at the next Urban Forum early in 2002.

As a follow-up to these activities, an *Addressing Handbook* (Vol. I Addressing Technique, Vol. II Applications to Urban Management) and a Website are under preparation, again under the auspices of the MAE and the WB.

(Source: Hugues Leroux & Florence Verdet, Groupe Huit)



Conakry: map prepared by the addressing department (extract).

**Further information can be obtained from:**

**Groupe Huit**

5, rue Mazarine – 75006 Paris – France

Tél.: 33 (0)1 43 29 53 44 – Fax: 33 (0)1 43 29 35 54

E-mail: [groupehuit@groupehuit.com](mailto:groupehuit@groupehuit.com)

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●●● Today, both these conditions are met by the United States. In this context, the European Galileo positioning project for mobile systems (equivalent to GPS) is most important.

### France is building up its geographic information production system

Access to source materials (satellite and aerial images, spatial positioning systems, field data acquisition, existing data digitizing) is key to all geographic information activities.

In this context, France is building up its national information production system and is improving the

guarantee of equal access for all operators to the databases integrated by the National Geographic Institute (IGN).

For this purpose, the French government has requested IGN to develop new technology to provide country-wide coverage by 2007 through orthophotographic and topographic data.

The system is completed by the digitization of the cadastral register compatible with these data, and work on postal address

geocoding (large-scale geographic repository).

France is seeking to strengthen legal protection of source data in the interests of national sovereignty and equity for the various partners. The question of a right to access information vital to the safety of goods and persons, that will also benefit the least developed countries, could be validly examined.

The establishment of global regulation will influence the perennial development of added value services in three areas:

- drawing up an international agreement and defining three occupation levels in the geographic information sector: creating reference databases, producing standard sophisticated products and creating the related services;
- strengthening national production in all countries (or groups of countries), under optimum economic conditions: public/private partnership, regional cooperation etc.
- developing jointly-produced international information bases.

The general public and economic actors will only benefit from progress if adequate local services exist to make the

## Information during emergence from conflict

Emergence from conflict is a time when information has an important role to play, but it is a particularly difficult time for collecting and handling this information.

Since the 1990s, experiences of setting up information systems during emergence from conflict have been multiplying.

In Afghanistan (1994), the PROMSI system gathered an impressive amount of information on the country's reconstruction requirements, physical and economic data and aid programmes. During this reconstruction and the return of refugees and displaced persons, the system was enriched.

Regrettably in Mozambique, the systematic inventory of the various districts' reconstruction requirements, undertaken in 1994, has almost completely disappeared.

In Bosnia Herzegovina, the International Management Group was set up under the impetus of the Office of the United Nations High Commissioner for Refugees (UNHCR) and with European financing. Its databases enabled the reconstruction plan to be implemented immediately after the Dayton Agreements. The PIMS (Project Information Monitoring System) has since been used as a model for new information systems that are simple, efficient (frequent updating) and easy to disseminate, on rehabilitation and reconstruction projects and programmes.

In 1999 in Kosovo, through the Humanitarian Community Information Centre (HCIC), the geographic designations became standardized and an inventory of housing rehabilitation requirements was immediately formed. This inventory played a key role in the rehousing of the Kosovar people during the 1999-2000 winter and was the basis for drawing up a housing reconstruction programme in the province.

In 2000, an information system (SLIS) was introduced in Sierra Leone, which combined databases on exiled refugees in Liberia and Guinea, a library kept up to date on aid requirement assessments and an inventory of ongoing projects.

These information systems are becoming normal practice during emergence from conflict. They are developing in Kenya, with a regional perspective (Horn of Africa, Great Lakes), in Eritrea, in Burundi, and are receiving a new lease of life in Afghanistan and the neighbouring countries.

Today's challenges are institutional and methodological. At institutional level, the tendency is to consider the data processing aspect of these systems. They must now be better integrated into the decision-making and management tools. It is more a question of information for management than information management.

The main methodological challenge is to build databases with controlled reliability using sources with uncertain accuracy and reliability. Methods of reconciling sources and combining imperfect data still have to be invented.

(Source: Vincent Lacour, "Crisis Prevention and Exit" programme, Isted)

### Further information can be obtained from:

#### Isted

La Grande Arche, Paroi Sud  
92055 La Défense Cedex - France

Tel.: 33 (0)1 40 90 31 26

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E-mail: vlacour@worldonline.fr / lamblin.france@wanadoo.fr

Website: <http://www.isted.com>

best possible use of the available geographic information. This will be achieved through:

- capacity-building (training geographic information suppliers and users, technology transfers, aid for facilities);
- promoting geographic information uses by the public and private sectors and associations.

The geographic information sector has a long tradition of worldwide scientific cooperation: Global Spatial Data Forum, Global Mapping Project, International Hydrographic Organization, International Cartographic Organization, International Federation of Surveyors, etc. Permanent world projects and more targeted projects provide opportunities for technicians and researchers from all countries by maintaining their skills at the highest level and implementing technology transfers tailored to the international or local problems to be solved.



France is particularly concerned to develop these institutions and seeks to strengthen the participation of all countries in both scientific and professional international organizations and associations, The International Standards Organization (ISO), whose work is key to the emergence of conditions of open competition between major private operators deserves special emphasis. ●

(Source: François Noisette, Director of DREIF – Paris Region Public Works Department)

Further information can be obtained from:

**CNIG – Conseil National de l'Information Géographique**

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E-mail: [cnig@cnig.fr](mailto:cnig@cnig.fr) – Website: <http://www.cnig.gouv.fr>

French experience of geographic information on CD-ROM (cf. page 8).

## France's visual contribution to AfricaGIS

Since 1993, AfricaGIS has gained recognition as the African conference on Geomatics. Edition 2001 was held in Nairobi (Kenya) from 5 to 9 November and brought together 400 participants, including a twenty-member French delegation<sup>1</sup>.

Organized by the EIS Africa Association (Environmental Information System Africa), in collaboration with the Geoinformation Society of Kenya, and with the support of the United Nations Environmental Programme (UNEP), AfricaGIS 2001 addressed the use of environmental and geographic information towards sustainable development.

France's presence took the form of contributions for the plenary sessions and leadership of a workshop on French institutional organization (under the auspices of the National Council for Geographical Information – CNIG). Several companies (Realia, Groupe Huit, Burgeap, GDTA) ran stands for the exhibition.

In contrast to the highly "techno-centred" approach of American Companies, such as Space Imaging or ESRI, the French contributions focused more on data and on organizational questions and training, and met with a very favourable response. The creation of repositories, the "repatriation" of data from industrial countries, the poor quality or even absence of existing data, the need for training and local capacities, were central to the issues raised. Ownership is equally crucial. For members of an Aborigine community in North Queensland (Australia), for instance, who have set out to delimit their territories, all information used for a map of wetlands as an aid to the definition of their country, remains the property of the community.

Many countries need data that is not solely based on the analysis of aerial or satellite images. It can become vital for them to build address bases. An exact address is essential for many an administrative act, whether to collect tax or to distribute grants. In Mali, decentralization has entailed the creation of several hundred communes, and this has required extensive map-making to help the field officials. Another important sphere of work, which has generated considerable public interest, has been the build-up of data for the identification of water resources.

The papers also highlighted several initiatives for the creation of national geographic and environmental infrastructure.

The next edition of AfricaGIS is scheduled for 2003 in Dakar (Senegal), to be hosted by the Ecological Monitoring Centre.

(Source: Françoise de Blomac, SIG-La Lettre, in collaboration with the French delegation<sup>1</sup>)

<sup>1</sup> French delegation members were representatives of the State departments (Ministry of Public Works, Transport and Housing – METL, National Geographic Institute – IGN), public or semi-public institutions (such as Aerospace Remote Sensing Development Group – GDTA, International Cooperation Centre of Agronomic Research for Development – CIRAD) and companies (such as Burgeap, Groupe Huit, G2C Environnement, Realia).

Further information can be obtained from:

**SIG-La Lettre**

157, chemin des Processions

34730 Saint Vincent de Barbeyrargues

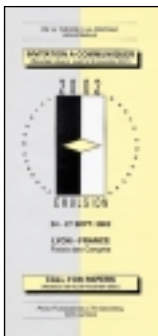
France

E-mail: [deblomac@sig-la-lettre.com](mailto:deblomac@sig-la-lettre.com)

# Information

## Events

### 3RD WORLD CONGRESS ON EMULSION

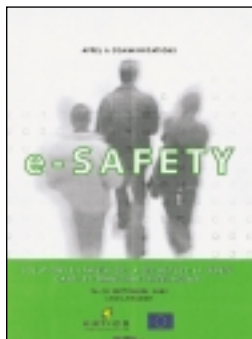


The Third World Congress on Emulsion will be held in Lyon (France) from 24 to 27 September 2002. This congress is an international

forum dedicated to encouraging discussions between researchers, scientists and industrial engineers on a subject of mutual interest, emulsion, and to promote transfers of technology and fundamental knowledge in this field.

► **Contact:**  
CME  
50, place Marcel Pagnol  
92100 Boulogne-Billancourt  
France  
Tel.: 33 (0)1 47 61 76 89  
Fax: 33 (0)1 47 61 74 65  
E-mail:  
alain.lecoroller@wanadoo.fr  
Website: <http://www.cme-emulsion.com>

### E-SAFETY CONGRESS



The "e-Safety" Congress will take place from 16 to 18 September 2002 in Lyon (France). Organized by Ertico, in cooperation with ITS France, it will cover all safety and security aspects of intelligent transport systems (ITS). At the same time, an exhibition of ITS technologies will present innovations, services and projects. Main themes: traffic and travel information: traffic detection and monitoring; enforcement; traffic management and control; urban mobility, payment systems, active safety and driver assistance; personal protection and safety, commercial freight and fleet; rail traffic management.

► **Contact:**  
Mobility Events & Services BV  
licenced by Ertico  
Strijkviertel 56, PO Box 168  
NL-3454 ZK De Meern  
The Netherlands  
Tel.: (31 30) 666 73 88  
Fax: (31 30) 666 33 36  
Website: <http://www.lyon2002.itscongress.org>

### CODATU X



The 10th Codatu Conference will be held from 12 to 15 November 2002 in Lomé (Togo) on the theme: "Urban mobility for all, solutions according to city size" This international event is organized by Codatu (Cooperation for Continuing Development of Urban and Suburban Transportation), an association to promote scientific, technical, economic and social exchanges and activities concerning urban and suburban transportation systems.

► **Contact:**  
Codatu - 20, rue François Garcin  
69003 Lyon - France  
Tel.: 33 (0)4 78 62 23 09  
Fax: 33 (0)4 78 62 32 99  
E-mail: [codatu@wanadoo.fr](mailto:codatu@wanadoo.fr)  
Website: <http://www.codatu.org>

## Training

### MASTERS IN INTELLIGENT TRANSPORT SYSTEMS



The widespread application of new technologies in the transport sector is creating new professional occupations that require project managers to have

multi-disciplinary skills. To prepare for these new responsibilities, the École Nationale des Ponts et Chaussées (ENPC), in cooperation with the *Institut National de Recherche sur les Transports et leur Sécurité* (Inrets - National Institute for Transport and Safety Research) and the *École Supérieure d'Electricité* (Supélec), has set up a masters degree course of the *Conférence des Grandes Ecoles*, specializing in Intelligent Transport Systems (ITS).

► **Contact:**  
ENPC  
Georges Philippe, Responsable du Mastère SIT  
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6-8, avenue Blaise Pascal  
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Fax: 33 (0)1 64 15 36 91  
Website: <http://www.enpc.fr>

### ENPC: INTERNATIONAL CONTINUOUS TRAINING PROGRAMMES



The new edition of the international continuous training catalogue is now available. This brochure presents all courses offered in 2002 by the *École Nationale des Ponts et Chaussées* (ENPC) on the subjects such as: management, environment, urban management, real estate, infrastructure, transport and customized projects. The training agenda includes the "Cesroute" course, jointly organized with Isted.

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ENPC/PFE  
28, rue des Saints Pères  
75343 Paris Cedex 07 - France  
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Fax: 33 (0)1 44 58 28 30  
E-mail: [rose@mail.enpc.fr](mailto:rose@mail.enpc.fr)  
Website: <http://www.pfe.enpc.fr>

## CEBTP 2002 COURSES



The Experimental Centre for research and studies in building and public works (CEBTP) has published its *Formation 2002* catalogue of training courses. This covers the main areas of activity in the building sector: acoustics, work coordination, diagnosis, construction law, environment, foundations, materials, soil mechanics, pathologies, quality, regulations, rehabilitation, finishings, structures, earthworks and heat engineering.

### ► Contact:

CEBTP  
Service Formation  
Domaine de Saint-Paul  
78470 Saint-Rémy-lès-Chevreuse  
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Tel.: 33 (0)1 30 85 24 90  
Fax: 33 (0)1 30 85 24 87  
E-mail: info@cebtpt.fr  
Website: <http://www.cebtpt.fr>

## CATALOGUE 2002 PUBLICATIONS / CSTB TRAINING



The new edition of the catalogue of the Scientific and Technical Centre for Construction (CSTB) includes:

- The REEF documentary database;
- Construction rules;
- Handbooks, dictionaries, directories;

- Software;
  - Training.
- **Contact:**  
CSTB Publications-Diffusion  
B.P. 2  
77421 Marne la Vallée Cedex 2  
France  
Fax: 33 (0)1 64 68 84 78  
E-mail: [publications@cstb.fr](mailto:publications@cstb.fr)  
Website:  
<http://www.boutique.cstb.fr>



## WINTER SERVICE IN FRANCE



For the XIth International Winter Road Congress (Sapporo – Japan, 28-31 January 2002), Isted produced a CD-Rom on winter service in France, at the request of the French Directorate of Roads, Ministry of Public Works, Transport and Housing. Designed to promote French knowhow, it is divided into three parts: the road network in France, winter service organization, trends. It also includes much practical information: contacts and partners, a bibliography and a French-English glossary.

### ► Contact:

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Website: <http://www.isted.com>

## METHODOLOGICAL GUIDE – ROAD SAFETY IN AFRICA

### Feedback from experience 1994-2001



This guide, intended for those involved in road safety in developing countries, provides elements derived from a regional programme of support in defining and implementing road safety policies in Sub-Saharan Africa. It was drawn up to accumulate data and promote pilot experiences and local initiatives in some countries. The document is edited by Isted and an English version is available.

### ► Contact:

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Website: <http://www.isted.com>

## CITIES AND REGIONAL PLANNING



Table of contents of the latest issue of *Villes en Développement*:

- Regional planning in Africa: a new lease of life for decentralization?
- Pathways to decentralization in Thailand;
- Why is regional planning a priority for Morocco today?

- Cooperation project for regional planning in Venezuela.

The editorial of this issue is written by Serge Wachter, Scientific Adviser, Forward Studies Centre of the Department of Research and Technical Affairs of the Ministry of Public Works, Transport and Housing.

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## GIS FOR INVOLVEMENT AND DECISION-MAKING

### 30 French experiences



Good governance of cities and metropolises requires collective projects to mobilize a whole range of actors whose numbers increase with the size of the city. Iaurif (Institute for Urban Planning and Development of the Paris Ile-de-France Region) has accordingly decided, with the aid of Cnig (National Council for Geographical Information) to devote a publication to French practice of Geographic Information Systems (GIS). It is a collection of successful, practical experiences of partnerships actually implemented by French authorities of all sizes.

### ► Contact:

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15, rue Falguière  
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Fax: 33 (0)1 53 85 76 02  
Website: <http://www.iaurif.org>  
Price: F125 / e 19.05

**GEOGRAPHIC INFORMATION:  
THE FRENCH EXPERIENCE**



This CD-Rom (French/English/ Spanish) presents French geographic information knowhow. It is published under the auspices of the Ministry of Public Works, Transport and Housing (Department of Economic and International Affairs), with the aid of the National Council for Geographical Information (CNIG) and the French Association for Geographical Information (Afigéo).

► **Contact:**  
CNIG  
136 bis, rue de Grenelle  
75700 Paris 07 SP  
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Fax: 33 (0)1 43 98 85 66  
Website: <http://www.cnig.gouv.fr>

**MANAGING THE DEVELOPING  
CITIES – NEW PRACTICES**



This publication in the collection "Études et Développement" collates summaries of contracts executed abroad between 1994 and 2000 by Iaurif (Institute for Urban Planning and Development of the Paris Ile-de-France Region) together with the action of Apur (Paris Urban Planning Office) in Phnom Penh (1995-1997). The texts are in French and English.

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Website: <http://www.iaurif.org>

**ATLAS OF URBAN  
AGGLOMERATIONS**



Published by the French Federation of Town Planning Agencies (FNAU), the brochure gives a picture of the first 100 urban areas in metropolitan France and analyses major institutional, demographic, economic and social trends, based mainly on results of the most recent census-taking.

► **Contact:**  
FNAU  
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75007 Paris  
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Fax: 33 (0)1 45 49 94 46  
E-mail: [fnau@fnau.org](mailto:fnau@fnau.org)  
Website: <http://www.fnau.org>

**THE AUTOMATED HIGHWAY –  
A PERI-URBAN SCENARIO**



Is the automated highway a solution to today's congestion on our motorways? What will it really achieve? What technical functions are required, what are the limiting factors? What is the status of research? This publication provides feedback on work and

discussion by researchers from Inrets, Inria, LCPC, ENSMP, ENST and ENPC on the development towards safer, more comfortable motor traffic on the most crowded routes.

► **Contact:**  
LCPC / IST  
Diffusion des éditions  
58, boulevard Lefebvre  
75732 Paris Cedex 15  
France  
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Fax: 33 (0)1 40 43 54 95  
Website: <http://www.lcpc.fr>  
Price: e 22,10 excluding tax

**INTELLIGENT TRANSPORT:  
THE FRENCH KNOWHOW**



This CD-Rom has been produced by the Centre for Studies on Road Networks, Transportation, Urban Planning and Public Construction (Certu), the Ministry of Public Works, Transport and Housing, through Department of Economic and International Affairs (DAEI) and Department of Road Safety and Traffic (DSCR) and Roads and Motorways Engineering Department (Setra). A real interactive journey through the fields of French knowhow: geographic information, the sea, meteorology, tourism, not to mentioned cross-cutting themes. Practical information is also included (key words, list of French companies, contacts, etc.).

► **Contact:**  
Certu  
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Website: <http://www.certu.fr>

Isted, a non-profit organization, is a platform for study and debate, information and action, at the service of its public and private members in the public works, transport, planning and environment sectors. It facilitates their international activities, optimizes the use of French knowhow throughout the world and helps to implement international programmes with third country leaders.

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- PORT AUTONOME DE LA GUADELOUPE
- PORT AUTONOME DE MARSEILLE
- PORT AUTONOME DE PARIS
- PORT AUTONOME DU HAVRE
- PUCA
- RATP
- ROCK
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- SECMAIR
- SEFI
- SER
- SETRA
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**La Lettre**

Publication Manager:  
Jean Smagghe, President of Isted.  
Chief Editor:  
Xavier Crépin,  
Isted General Manager.  
Subeditor: Anne Baron.  
Design, layout and creation:  
Louma Productions, 34150 Aniane.



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