INSEE has launched many large-scale projects in recent years, all of them directed toward the same medium-term goal: to achieve the productivity gains afforded by technical progress and invest the resulting potential in new products and new services that satisfy our users’ high-priority requirements.

The central project, around which all the others revolved, was the implementation of a new census method—the “redesigned population census” (Recensement Rénové de la Population: RRP)—in which the data are to be gathered in successive annual collections. The resources needed to carry out these annual census surveys would accrue from other national projects by modernizing the relevant applications and concentrating them in selected INSEE regional offices. The Institute had already successfully performed an operation of this kind for the processing of civil-registration records and the management of registers of natural persons. This time, the operation would concern work on CPI (consumer price index) production and on the management of SIRENE (register of French enterprises and local units).

Along with the introduction of the redesigned census, all the regional offices will consolidate the production of regional and local statistics on enterprises and employment: this initiative is called “Local Knowledge of the Production System” (Connaissance Locale de l’Appareil Productif: CLAP). Lastly, as part of our “Consistent Regional Offering” target (Offre Cohérente pour les RÉgions: OCRE), we have already taken the first steps toward enhancing the efficiency of our Dissemination and Regional Action network.

All these projects are broadly designed to promote a greater autonomy for our Regional Offices as well as a robust expansion of networked operations. Their convergence point is 2004, with the new census being launched at the start of the year. It was time, therefore, to provide a detailed progress report. That is the purpose of this special section, which also describes some of the milestones in the history of our Institute.

Jean-Michel Charpin
Director-General, INSEE

Previously Head of the French Planning Office (Commissaire au Plan)
Jean-Michel Charpin was appointed Director General of INSEE in February 2003. He replaces Paul Champsaur, named Chairman of the Telecommunications Regulatory Authority (ART).
Redesigning the French population census

Until now, the French population census involved a single, comprehensive enumeration every seven to nine years. That approach has lived. A new census method is being introduced in 2004, in which the data will be gathered in successive annual collections. More specifically, an exhaustive data collection will be carried out every year and by rotation in one-fifth of the municipalities (communes) with fewer than 10,000 inhabitants, plus sample surveys in municipalities of 10,000 inhabitants or more.

This methodological revolution will be combined with a closer partnership between municipalities and INSEE: the Institute will organize and check the data collection; the municipalities will prepare and carry out the "census surveys." On a routine basis—i.e., from 2008—the redesigned census will provide two sets of information at the end of each year: (1) the updated figures for France’s resident population, which will take effect on January 1 of the following year; (2) detailed statistical results on the population and dwellings, covering the different levels of French territorial organization. These detailed statistics will explicitly refer to a median date, namely, January 1 \( n-2 \) for the results published at the end of year \( n \). The \( n-2 \) figures for municipalities of fewer than 10,000 inhabitants enumerated in the two previous years \( n-4, n-3 \) or two following years \( n-1, n \) will be obtained by extrapolation or interpolation. Both the detailed statistics and the population figures will be consolidated with the aid of ancillary sources, in particular the administrative records of the social-security and tax authorities.

The new system will build up to cruising speed during an initial collection cycle of five years. In this period, output—apart from “feedback to mayors”—will be restricted to national estimates (starting in 2004) and regional estimates (starting in 2005 or 2006), valid at January 1 of the collection year. Naturally, these statistics will continue to be produced once the census has reached cruising speed.

A big step forward

The new census will give local authorities—including elected officials and management-level civil servants—information that meets their demands for periodic snapshots of their territorial units to highlight local changes and trends. This will facilitate the implementation of forward-looking management policies such as impact studies for...
infrastructure and construction projects, development of plans for major-hazard prevention, drafting of zoning plans, and urban-planning programs. At more aggregated geographic levels, the master plans for development and the planning agreements between the central government and French regions will tap the same statistical sources.\footnote{If the redesigned census had already been implemented, the preparation of planning agreements between the central government and the regions in 1998/1999 would have relied on 1998 data for the regional framework and on 1996 for sub-regional areas, rather than on 1990 data.}

Beyond the supply of annually updated information, the new census method calls for greater teamwork and stronger partnerships between INSEE and local authorities. The latter will thus find their specific needs taken into better account. In particular, they will be able to obtain data on geographic areas that they will have specified in order to address local issues (nuisance zone for a particular facility, kindergarten catchment area, etc.). Access to data concerning such areas will be subject to approval by the National Commission on Information Technology and Civil Liberties (Commission Nationale de l'Informatique et des Libertés: CNIL).

The redesign will also smooth the burden of census-related expenses not only at INSEE but also in municipalities of 10,000+ inhabitants.\footnote{The same will apply, in practice, to Saint-Pierre-et-Miquelon, composed of only two municipalities, both below the 10,000-inhabitant threshold.}

### Uses of the census

More than 200 laws or regulations refer to the resident population, particularly in the following areas: central-government subsidies to local government; voting procedures in municipal elections; number of municipal councilors; number of municipal jobs; salaries and compensation of local-government employees; urban planning and works; rates of certain local taxes; rent legislation; opening of new pharmacies.

The quantitative census data on socio-demographic structures find a wide variety of uses in analysis, research, forecasting, and policy-making—not only at the national level, of course, but especially at the local level. In these times of major social change, it is indeed essential to measure individual situations and travel patterns, often at the finest level of detail (such as the neighborhood in large cities). For example, it is useful to know the school-age population and project it into the future in order to plan educational facilities. Likewise, municipalities and départements need to locate their elderly inhabitants in order to take the decisions that will improve their living conditions. More generally, government officials and local authorities rely on census data to guide their analysis and decision-making in policy areas such as employment, training, social protection and healthcare, and the construction of social, cultural, sports, and transportation facilities and infrastructure. And, of course, private-sector firms that are planning to set up operations in an area have a major interest in finding out about local skills (description of the labor force) and the potential local market.

The census also tracks the status of the housing stock and housing conditions, measured by the level of dwelling amenities. Urban planners, developers, and sociologists can thus use the data to provide public decision-makers with ideas for improving local residents' living conditions.

### Legal arrangements

The scope of the redesign called for special legal arrangements. General population censuses were previously regulated by decrees. Guidelines for the new census, by contrast, are spelled out in a piece of legislation: title V of Act no. 2002-276 of February 27, 2002, on “local democracy” (démocratie de proximité):

- central government responsible for overall organization;
- compliance with Acts no. 51-711 of June 7, 1951 (amended), on compulsory data-gathering, coordination, and confidentiality in the field of statistics, and no. 78-17 of January 6, 1978, on information technology, data files, and civil liberties;
- task-sharing between INSEE (which “organizes and checks information collection”) and the municipalities or inter-municipal cooperation agencies (which “prepare and perform the census surveys”);
- different collection methods according to municipality size: exhaustive surveys, every five years, in towns of fewer than 10,000 inhabitants; annual sample surveys in the rest;
- annual publication of resident-population figures, whose preparation may also rely on data from other surveys or administrative records;
- five-year general census in French Polynesia, New Caledonia, Mayotte, and Wallis and Futuna Islands.\footnote{The same will apply, in practice, to Saint-Pierre-et-Miquelon, composed of only two municipalities, both below the 10,000-inhabitant threshold.}

The redesign will also smooth the burden of census-related expenses not only at INSEE but also in municipalities of 10,000+ inhabitants.
The Act’s final article (no. 158) refers to an implementation decree: “A decree from the Council of State shall define the application procedures for the present title [of the Act] after an opinion on the determination of the procedures for performing sample surveys; said opinion shall be offered by a special commission formed at the National Council on Statistical Information [Conseil National de l’Information Statistique: CNIS]. The commission shall comprise statisticians, representatives of local authorities, and representatives of central government.”

A decree (no. 2003-485 of June 5, 2003) was published in the Journal officiel of June 8, 2003. It defines the population categories making up what we usually call the resident population and the procedures for conducting census by municipality size relative to the legal threshold of 10,000 inhabitants. The decree’s article 33 establishes a five-step processing of individual data for the new census: information collection, survey exhaustiveness checks, survey-response consistency checks, capture and processing of collected data, and dissemination of information derived from collected data.

Another regulation, also called for in the Act mentioned above, draws up an annual list of the municipalities in which census surveys are to be conducted in the following year. The very first of these annual decrees (no. 2003-561 of June 23, 2003) was published in the Journal officiel of June 27, 2003. It divides municipalities into six groupings: five groupings of municipalities with fewer than 10,000 inhabitants (see below) and a single grouping of municipalities of 10,000+ inhabitants. The decree also sets the overall calendar. Subsequent decrees will take into account any changes that may have affected the make-up of municipal groupings, such as mergers, splits, and threshold crossings.

The final component of the system is a set of “implementation ordinances” (arrêtés d’application) appended to the Council of State decree.

A double sampling plan

The balanced-samples method will be applied, which basically consists in benchmarking the sample to target distributions, each pegged to a single variable. In this specific instance, the three “unavoidable” criteria were: population by age group, by sex, and by dwelling type (private house or apartment). Naturally, the target-distribution figures will be taken from the 1999 population census, the last one conducted before the redesign.

As mentioned earlier, annual sample surveys will be carried out in all municipalities of 10,000+ inhabitants, with complete territorial coverage over a five-year cycle. In practice, the work will largely consist in selecting the most representative possible set of geographic areas in each municipality every year.

The problem is somewhat different for municipalities of fewer than 10,000 inhabitants, where census surveys will be exhaustive and will be conducted by annual rotation over a five-year period. The data collected in these municipalities, combined with those gathered in municipalities of 10,000+ inhabitants, are designed to produce significant estimates at the national and regional levels. The aim here, therefore, is to divide the set of municipalities of fewer than 10,000 inhabitants into five groups that are as homogeneous and representative as possible. The national and regional estimates will be all the more reliable as the individual groups will provide an exact image of the whole.

Also, the combination of all the data collected over a five-year cycle should allow statisticians to determine the resident population of all administrative divisions as well as detailed statistical results (valued at the median year in the cycle) at all levels of French territorial organization.

In municipalities of 10,000+ inhabitants

In these municipalities, the census will be conducted on a continuous basis through successive annual sample surveys, each covering 8% of the dwellings in the municipality.
The data gathered for five consecutive years will be combined to prepare results applicable to the median year of the cycle, extrapolated to the complete set of dwellings in the municipality. The annual samples (which will consist of addresses) will represent their municipality as faithfully as possible, on four criteria: population by age group, sex, and type of dwelling (private house or apartment), but also sub-municipal distribution of dwellings.

The sampling frame will be the Located Buildings Register (Répertoire d’Immeubles Localisés: RIL). The municipal addresses will initially be distributed into five rotating groups, balanced in terms of the number of dwellings (private houses and apartments) and number of persons (by sex and by age group). Each group will be assigned to a separate year in a recurrent five-year cycle. The year’s address sample will then be selected in the ad hoc group, of which it will represent 40%, i.e., 8% of all the municipality’s residential addresses and dwellings. All the sampled addresses will be surveyed exhaustively.

A special treatment will be reserved for (1) “large” addresses (defined as those containing the greatest number of dwellings and comprising a total 10% of dwellings in the municipality) in order to minimize cluster effects, and (2) “new” addresses, which will be systematically enumerated within five years of their first occurrence.

In the overseas départements (DOMs), where the RIL has not yet been compiled, five groups of quantitatively balanced blocks have been defined in each municipality of 10,000+ inhabitants. Year after year, a mapping survey is conducted in each group to identify and locate all buildings. A sample of inhabited buildings is taken, representing 8% of the dwellings in the municipality. The census survey for the year covers these dwellings.

In municipalities of fewer than 10,000 inhabitants

The purpose of the exercise, it will be recalled, is to divide these smaller municipalities into five rotating groups as homogeneous and representative as possible.

But at what geographic level can we ensure good representativeness? The statistical problem is expressed in terms of “degrees of freedom.” We can use the image of scales comprising five pans that we would like to balance at the same height; the weights to be placed in the pans are the municipalities of fewer than 10,000 inhabitants. Intuitively, we can see that a proper balancing requires having enough weights to distribute, i.e., enough “degrees of freedom.” Now this requirement cannot be met at the département level. True, it could be met in départements containing a sufficient number of dwellings.

The exact wording of the “local democracy” (démocratie de proximité) Act is as follows: “For municipalities with fewer than 10,000 inhabitants, the surveys shall be exhaustive and carried out annually on a rotating basis over a five-year period. For the other municipalities, a sample survey shall be conducted every year; the entire territory of these municipalities shall be covered by the end of the same five-year period.”

In practice, and given the budget constraint, the annual sample surveys in municipalities of 10,000+ inhabitants will each cover 8% of the dwellings in the municipality. By the end of the first five years, 40% of the dwellings in the municipality will therefore have been surveyed.

This should not be seen as a contradiction with the wording of the Act. The sampling frame from which the samples are drawn will include all addresses in the municipality. As a result, the entire territory of the municipality will effectively have been surveyed by the end of the five-year period.

8. Image borrowed from Jean-Marie Grosbras, supervisor of the “Methodology” chapter of the population census redesign program.

Located Buildings Register (RIL)

The RIL was established by a government ordinance of July 19, 2000, amended on October 9, 2002. It is a register of individually located addresses geocoded on digitized maps. The RIL was initially compiled from 1999 census data, which provided a statistical description of each residential building. It is continuously updated from various databases (building and demolition permits, occupancy tax, post-office records, etc.) and information supplied to INSEE by municipalities. Other updates may, of course, be feasible through direct field observation. In addition to residential buildings, the RIL will also cover business premises and, eventually, public infrastructure and community services. For the purposes of preparing the redesigned census, each municipality is authorized to access RIL data concerning its own territory.
number of municipalities of fewer than 10,000 inhabitants, but not in others. To apply a consistent principle nationwide, we have therefore chosen a regional balancing level. However, we will ensure that each département in the region is represented in each rotating group in proportion to its weight.

Once the balancing has been achieved, each rotating group will be representative at the regional level in terms of population by age group, sex, and type of dwelling (private house or apartment) and, at the département level, in terms of the number of dwellings.

**Task-sharing between municipalities and INSEE**

“Information collection shall be organized and controlled by the National Institute of Statistics and Economic Studies [INSEE]. The census surveys shall be prepared and conducted by the municipalities or public inter-municipal cooperation agencies, which shall receive a fixed-sum allocation from the central government for that purpose” (excerpt from title V of the Act on “local democracy” [démocratie de proximité]).

In practice, the classic method of questionnaire delivery/collection by enumerators will continue. Enumerators will consist of employees of the municipality (or public inter-municipal cooperation agency) appointed and supervised by the municipality (or agency) and, if need be, specially hired for the purpose. As a first approximation, the collection will yield, in January and February of every year, some 8.4 million individual schedules, of which 6 million in municipalities of fewer than 10,000 inhabitants and 2.4 million in those with 10,000+ inhabitants.

Tasks assigned to municipalities will include checks on the collection’s exhaustive coverage of enumerated dwellings. INSEE will be in charge of all pre- and post-collection operations, from the specification of the sampling plan to the publication of results, and including the definition of content for enumerator training programs.

**The supervisor**

During the preparation and execution of the census survey, the municipality will be in contact with an INSEE representative: the supervisor. The main role of a supervisor will be to provide technical support, advice, and expertise to the municipal staffer appointed by the mayor to administer the census survey. Supervisors will help train enumerators in the definition of survey units, collection procedures, and legal rules applicable to the individual data collected. And they will exercise INSEE’s legally assigned control function by monitoring collection exhaustiveness, compliance with procedures, and protection of data collected.

Each year, more specifically during a five-month period spanning Q4 of year \( n-1 \) and M1-M2 of year \( n \), some 550 supervisors will liaise with about 8,000 municipalities. Nearly all will be INSEE personnel. Their tasks will occupy them five days a month in October, November, and December, and full-time in January and February. On March 1, they will return to their “home” units.

New supervisors will receive six days’ training in September. Starting in 2004, shorter (two-day) sessions will also be held for supervisors who continue to take part in census production.

**What will change for local residents?**

In practice, not much, although they will surely wonder “why have I been enumerated and not my neighbor?” or “why are we being enumerated and not the town next door?” The communication campaign on
collection operations must, of course, address these distinctive features of the census. Local inhabitants will also receive information, in a more direct form, through documents made available by INSEE and taking their suggestions into account.

We emphasize that the confidentiality of the data collected will remain an intangible principle: the enumerators (who are sworn to professional secrecy), municipalities, and INSEE must scrupulously enforce it. Naturally, individual information cannot be used under any circumstances for administrative or tax audits. Just as obviously, their processing and dissemination will be totally anonymized, using procedures determined on the basis of recommendations from the National Commission on Information Technology and Civil Liberties (CNIL).

Consultation and participation

To achieve a successful census redesign, INSEE has sought a heavy involvement by players with a stake in census preparation and use. In 1999, the Institute therefore launched a wide-ranging round of consultations with its national and local partners, with the aim of making the “redesigned census” an operation designed with and for its users. The consultations began with the Interior Ministry and were then broadened to local elected officials (particularly their national associations), the other ministries concerned, the scientific community, and all of the statistics users represented at the National Council on Statistical Information (CNIS).

Consultations with ministries addressed legislative and regulatory issues. The conclusion was that the necessary legal adjustments to all the relevant laws and regulations could be decided by 2008, date of the first publication of annual resident populations. An independent scientific committee reviewed INSEE’s planned redesign methods in 1999. It found the project cogent and approved the options chosen for measuring the resident population. CNIS-led consultations on the uses of census statistics have already produced major advances, especially in the area of questionnaire development.12 INSEE

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arranged general presentations for elected officials and their national associations, most notably the French Mayors’ Association (AMF). Discussions centered on the respective roles of the central government and the municipalities, as well as on organizational requirements. By 2001, INSEE had met with some 2,000 mayors and many “town-hall general secretaries” to hear their expectations concerning the quality of the information produced and the degree to which inter-municipal ties would be taken into account. These steadily expanding consultations are now addressing the practical organization of collection operations.

A new situation for analysts and disseminators

With the new census, a substantial mass of statistical information on the population and dwellings will now be released annually rather than every seven to nine years; naturally, the new collection method will impact the accuracy of the results obtained. This new situation will require a learning process for disseminators, analysts, and users in general. In particular, they will need to measure the full contribution of the new census but also its limits. For lack of time, these issues have received scant coverage thus far. Yet they are critical for two reasons: (1) to convince users of the value of the new census data, and (2) to prepare disseminators and analysts for using the new source.

Accordingly, INSEE has set up an in-house working group with national and regional census users, including managers of national surveys, disseminators, and analysts. The group is chaired by Anne Flipo, head of the Studies and Dissemination Department at INSEE’s Nord-Pas-de-Calais Regional Office. It has identified the potential offered by the new collection method and evaluated its impact on the analyses—in particular at regional and local levels—traditionally based on census results.

A second INSEE internal working group, chaired by Guy Desplanques, head of the Demography Department, will examine the opportunities afforded by the availability of data from the annual census surveys, which, it will be recalled, covers a sample of nearly 8.4 million people.

Yet another working group has been established by the CNIS task forces on “Demography and Living Conditions” and “Regional and Local Statistics.” Statistical-information users are therefore very well represented on it. The group’s mission is to identify the range of potential uses of the new census data and to define the specific content of its “productions” (calendar and documentation media). It will also issue recommendations on several issues, including: a suitable timing for geographic-division updates; procedures for disseminating results concerning customized geographic areas; accuracy of results (how does the user wish to be informed of the accuracy of results?); comparison with 1999 census figures; and matching of the new data against other statistical sources. The working group will also look into possible ways of dissemination the Located Buildings Register (RIL).

Looking further ahead

Many other issues will need to be examined, such as the organization of statistical operations formerly conducted in conjunction with general population censuses, and the launch of new surveys based on the sampling frames that will be available each year thanks to the redesigned census data collections. Likewise, the groundwork for revising the questionnaires in anticipation of the 2009-2013 cycle should begin without delay. Experience has shown that this type of undertaking calls for extensive debates and testing—all of which takes time...

Looking beyond this initial overview, the new census is bound to stimulate many appetites, given its potential for producing an annual harvest of information at all of France’s organizational levels. In the immediate future, the priority is to establish the new census as a familiar feature in the landscape of all those who are heavily involved in its success: statisticians, municipalities—and citizens.

It will also be very interesting to watch experiences elsewhere, since the factors that prompted the census redesign in France are common to several countries. For the moment, at any rate, the new French census, as it is taking shape, resembles no other.

In conclusion, we should not overlook the reform’s consequences on INSEE. It introduces fairly radical

13. This examination, logically enough, should be incorporated into the preparatory work for the CNIS medium-term program for 2004-2008.
International comparisons

Broadly speaking, there are two forms of census:

- the traditional form: exhaustive coverage of the population through questionnaires sent by mail (United States), deposited/collected by an enumerator (Spain, Greece, Italy, Portugal) or deposited by an enumerator and returned by mail (Canada, United Kingdom);

- the mixed form, in which the enumeration is based on a population register and the socio-demographic description is based on data from other administrative records (Denmark, Finland) or from sample surveys (Netherlands, Sweden).

The traditional form may also lead to the mixed form when the country carries out a classic census also used to update a population register whose quality is deemed sub-standard (Austria, Belgium, Luxembourg, Switzerland).

The proceedings of the INSEE-Eurostat seminar on “censuses after 2001” (Paris, November 2000) describe the various arrangements in greater detail. The French project is being watched with interest by the international statistical community, as it offers a third way.

1. Proceedings available in the INSEE “Regards à l’étranger” series (no. 9) or online at: http://www.insee.fr/fr/nom_def_met/colloques/colloques.htm.
Inter-departmental identification of enterprises and local units

New advances with SIRENE 3

In France, it has become so natural to speak of “Sirene” tout court that many have no doubt forgotten the meaning of the acronym, originally written entirely in uppercase: Système Informatique pour le Répertoire des ENtreprises et des Établissements (“Computer system for the register of enterprises and local units [establishments]”). The first version of the application dates from the second half of the 1970s. Its sponsors were obviously inspired by Greek mythology, then the fashion at INSEE. By twisting the rules of French accents, they produced the charming acronym “Sirène” (siren, i.e., mermaid), which was promptly adopted as the name of the register itself.

The SIRENE register

The SIRENE register is an inter-departmental identification tool for all government agencies and social-security organizations that deal with enterprises¹ and their local units. It provides an exhaustive record, updated daily, of business creations and closures (discontinuations), as well as of other key events in the life of an enterprise—such as its economic activities and workforce size. At the same time, SIRENE is the benchmark register for business statistics. It is also the main source for preparing the “SIRENE Diffusion” database, which is used to make information available for commercial purposes.

In the late 1990s, the French authorities decided² that the only identification numbers that could be used by government agencies and social-security organizations in their dealings with enterprises were the codes assigned to enterprises in the SIRENE register—specifically, the SIREN number (for the enterprise) and SIRET number (for the local unit). Government agencies and social-security organizations accordingly introduced these codes into their own records. This was highly beneficial for statisticians, who are now able, thanks to the SIREN and SIRET numbers, to retrieve information that they previously had to collect through special surveys.³

¹. Strictly speaking, we should use the term “legal units” here—“enterprises” being those legal units that actually implement means of production. In practice, all legal units are registered in SIRENE.
². Decree 97-497 of May 16, 1997, on the single identification number for enterprises.
³. This helps to ease the response burden for firms, by not asking them for information that they have been requested to provide elsewhere.
Why SIRENE 3?

Developed in the late 1980s, the second version of the SIRENE application embodied radical changes in the content and structure of the register—now arranged into a database—and in its management procedures. It also incorporated a documentation system (SYDOSI) far ahead of its time. Version 2 underwent many later alterations, dictated by regulatory changes and INSEE’s efforts to improve and expand the services provided by the register.

However, some new enhancements become necessary, mostly to adapt to the growing use of SIREN and SIRET codes in the “business applications” of individual departments as well as in the information systems specific to departmental operations. Meanwhile, the new information and communication technologies were spreading exponentially. This phenomenon highlighted the limits reached by SIRENE 2 and the benefits that would accrue from modernization, both for enhancing the relevance of services offered to different users and for achieving productivity gains.

The main contributions of the SIRENE 3 application in regard to intra-departmental identification of enterprises and local units are reviewed in the following sections. Before reading on, we invite the “uninitiated” to study the box on p. 17, where they will find the basic details on SIRENE content and updating procedures.

A new workstation

The processing of declarations received by the “Business Formalities Centers” (Centres de Formalités des Entreprises [CFEs]), see p. 17) via electronic channels will be almost fully automated. Register clerks will thus be able to concentrate on problem cases. Of course, despite the growing number of electronically transmitted forms (currently just over 50%), data capture will still be required. The work will be performed on an associated workstation, so that the product will be automatically treated like a standard declaration filed electronically.

Meeting the expectations of administrative partners more effectively

In SIRENE 3, the identification number and (in future) the principal-activity code (Activité Principale Exercée: APE) assigned to a unit in its creation phase will be transmitted immediately, at its request, to the relevant CFE, if an electronic link exists. The CFE will forward the data to all the agencies that need to be informed of the business creation.

The layout and content of the AVISIRs (see p. 17) can be parametered to meet the needs expressed by different user categories.

A related service, also within the scope of the SIRENE 3 project, was developed in 2001, in liaison with administrative partners: an electronic directory for entrepreneurs seeking the contact details for the CFE to which they must apply. The resource is available free of charge on the web at www.sirene.tm.fr/annuaire.cfe.

Better identification

The improvements here will focus on the information contained in the declarations transmitted by the CFEs to INSEE. There will be checks to prevent duplication (a unit reported as a business creation but already present in the register). The main contribution of SIRENE 3 in this area will concern the identity of natural persons: last name, first names, date and place of birth. When INSEE receives a declaration of an unincorporated-enterprise creation, the identity of the individual named will be systematically checked against the National Identification Register of Natural Persons (Répertoire National d’Identification des Personnes Physiques: RNIPP), also managed by INSEE.

The identification tools will be revamped to make them more easily accessible to different users and for achieving productivity gains.

4. For example, tax records and management applications at the Health Ministry built around the database of healthcare and social-security establishments (FINESS).
Adaptable to user needs. They include register search and automatic harmonization of the variables of units in a list with the variables of the same units in SIRENE.

Enhancing the overall coherence of administrative records managed with SIRENE identification codes

The aim is to combine the management of these files with that of the SIRENE register—in other words, to turn them into “associated registers” guaranteed to synchronize with SIRENE. This work will be performed file by file, under contractual agreements between INSEE and partner agencies managing the files. The contract will spell out practical arrangements for incorporating SIRENE updates into the associated register. The two registers will naturally interface via the SIRENE identification codes, which will need to appear in the associated register in their exact original form.

Some projects are already at the planning stage, for example with the ministries in charge of health and social services for the national database of healthcare and social-security establishments (FINESS).

New statistical applications associated with SIRENE

An eloquent current example of this trend is the OCEAN application (French acronym for “Coordination Tool for Annual Enterprise Surveys”). It draws heavily on the SIRENE register and processes the data to make decisions on economic-activity classifications. OCEAN then returns this feedback to SIRENE, providing it with updated, summarized information on the principal economic activities of enterprises questioned in the annual surveys.

This “SIRENE-associated application” status is combined, of course, with the implementation of a specific system for exchanging information. If possible, it will be extended to other statistical operations. Potential projects under study include: the “accommodation” register (managed by the “tourism” competency center at INSEE’s Languedoc-Roussillon Regional Office); the “Single

Streamlined procedures for tracking the means of production

In SIRENE 2, the classic concepts of enterprise (the SIREN unit) and local unit (établissement: the SIRET unit) are supplemented by a third: the “economic local unit” (établissement économique) or ETEC unit. This was defined as a set of means of production and tracked as such, with a listing of the SIRET codes for the local units in which those means had been implemented and an indication of the relevant periods. This ETEC unit will no longer be managed as such in the SIRENE 3 application, which will incorporate a table of the succession links between local units.

The application will also incorporate tables of links between the local units producing goods and services and the local units that put means of production at their disposal (leased businesses, personnel management, retail banner networks, franchises, etc.). Under SIRENE 2, the ETEC unit provided a way of identifying the set of means contributing to the production of goods and services via a “singularity” code, but the various associated local units could not always be identified.

SIRENE 3 will also include tables showing links between SIREN units, particularly financial links between firms. These data are survey-based and thus subject to statistical-confidentiality rules. Their access will
be restricted to users who are members of the Business Statistics System (Système Statistique d’Entreprises: SSE).

**Fuller, clearer “labeling”**

Nearly all the data recorded in the register will be accompanied by a set of indicators specifying, among other things, their freshness, origin, and reliability. There will also be a “macro-metadata” evaluating the overall coherence of the entire unit.

Users will have read-only access to the history of register updates concerning the unit of interest. These histories are based on the dating of successive updates for a given variable, and could therefore be cluttered by parasite recordings. To avoid this problem, the SIRENE 3 workstation will incorporate a “correct/cancel” function allowing the clerk to erase a mistaken processing operation.5

**A new territorial organization**

The staged deployment of SIRENE 3 will be completed at the end of 2004. A key step was the implementation of the new workstation in late 2003. The productivity gains translate into several dozen person-equivalents. INSEE has accordingly adjusted its organization in metropolitan France (mainland + Corsica) by downsizing SIRENE-team activities in ten Regional Offices: Aquitaine, Bourgogne (Burgundy), Centre, Champagne-Ardenne, Île de France (Paris Region), Midi-Pyrénées, Nord-Pas-de-Calais, Haute-Normandie, Pays de la Loire, and Provence-Alpes-Côte d’Azur. The territorial coverage by INSEE offices in overseas départements (DOMs) is unchanged.

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5. At present, any update entails the creation of a new record in the unit’s history, making it impossible to distinguish between true changes and mere error corrections.

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**Articles on SIRENE published in Courrier des statistiques**

  (in English: “The inter-departmental system and SIRENE,” English series, no. 3, 1997)
  (in English: “The SIRENE directory,” English series, no. 3, 1997)
  (in English: “Making SIRENE-based products available to users,” English series, no. 3, 1997)
  (in English: “ODISSEE: a resource for disseminating and publicizing SIRENE data,” English series, no. 3, 1997)
Basic legal and administrative information on SIRENE

Legal basis

SIRENE’s legal basis is the decree no. 73-314 of March 14, 1973 (amended), establishing a national identification system and register for enterprises and their local units. Selected excerpts from the decree, updated with amendments contained in later decrees, are provided below:

Article 1 - The National Institute of Statistics and Economic Studies [INSEE] shall be in charge of maintaining a national register of: natural persons independently engaged in a non-payroll occupation; legal entities under public law or private law; and institutions and services run by the central government and territorial collectivities, as well as their local units, when they are recorded in the register of commerce and corporations (Registre du Commerce et des Sociétés) or in the register of trades (Répertoire des Métiers), or when they employ payroll workers, incur tax liabilities, or receive financial transfers from government [...].

Article 3 - The identification number assigned to each registered person is a nine-digit serial number. The identification number assigned to each local unit consists of the nine digits of the number for the person who engages in his or her activity in the unit, followed by a complementary number [...] specific to the unit.

Article 4 - The register shall contain the following identification information:
1. Last name and first name(s), pseudonym (if any), legal address, date and place of birth of natural persons, and discontinuation of their economic activity (if appropriate); company name or designation, acronym (if appropriate), legal status and head office of legal entities under private law; designation, acronym (if appropriate), legal status and address of main activity location of legal entities under public law and institutions and services specified in article 1.
2. For each local unit, its usual designation, address, and, if necessary, the date and origin of its creation.
3. Identification numbers for all persons and units.

Article 5 - The register shall also contain the following information:
1. Codes from the French classification of economic activities [...] describing the activities performed.
1 bis. Complementary codes identifying special forms of activity.
2. Categories indicating the size of the civil payroll workforce for the total entity and for each local unit.
3. An indication of the territorial terms of reference of the legal entities under public law and central-government institutions and services, as well as an indication of their administrative relationships with other persons or services recorded in the register.

CFE channels

The “Business Formalities Centers” (Centres de Formalités des Entreprises: CFEs) are one-stop facilities where businesses are required to file the “civil registration” paperwork required by government departments and social-security agencies. The main events to be reported are the creations and closures (discontinuations) of enterprises and local units, and specific key changes concerning economic activities (diversification or refocusing), payroll employees (for example, when a local unit switches from non-employer to employer status or vice versa), banner or trade name, local-unit transfer, or restructuring.

A copy of the declaration is sent to INSEE for checking, processing, and inclusion in the register. It is at this stage, of course, that INSEE assigns the identification codes (SIREN and SIRET numbers) for newly created enterprises and local units. INSEE processing operations include coding for legal category (enterprise-level variable) and principal economic activity (APEN for an enterprise, APET for a local unit). Each update in SIRENE generates a notice called AVISIR, which describes the type of change recorded and the updated register entry (information items listed in the decree of March 14, 1973) for the enterprise or local unit concerned. The AVISIR is sent to the reporting unit and the CFE where the declaration was filed, as well as to all the government departments and social-security agencies requiring information on the unit.

CFEs are located in chambers of agriculture, chambers of commerce and industry, chambers of trades and crafts, commercial-court registries, the organizations in charge of collecting social-security and family-benefit contributions (Unions pour le Recouvrement des Cotisations de la Sécurité Sociale et d’Allocations Familiales: URSSAFs), and local tax offices. The terms of reference and operating procedures for each CFE are described in a decree of 1996 replacing the decree of 1981 that established the centers.
Consumer price index

Computerization of data collection and restructuring of the regional network

Until the implementation of the “redesigned CPI” (Indice des Prix à la Consommation Renové: IPCR), all price quotations and related information in the field needed for CPI determination were compiled by price collectors on paper documents called “quotation sheets”—one sheet per quotation. The work was organized in weekly waves. At the start of each week, price collectors would return to the price-office clerks in INSEE Regional Offices to have their previous week’s collection edited and captured locally. The IPCR program concerned these “upstream” operations. The term “redesign” should not be misinterpreted, however. What INSEE specifically wanted to redesign was the index production method, not the index itself. The program’s central aim was to develop a computer-aided collection system, incorporating an automated initial edit. Far more than a “mere” technical enhancement of price collectors’ work, the implementation of this new collection arrangement entailed a radical change in the clerk’s job and in the networking of regional price offices.

**Birth of a project**

INSEE’s management committee decided to adopt portable data capture in October 1996. Six months later, in April 1997, an audit report by the Institute’s Inspectorate General outlined the technical consequences of the decision—namely, the elimination of capture tasks that occupied fully half of the clerks’ worktime. The report also recommended concentrating INSEE’s regional price-office network in a small number of Regional Offices (Directions Régionales).

After approval by the investment committee, the IPCR project was officially launched on September 10, 1998. Naturally, cost-cutting and productivity gains are not the only goals. Quality improvements are expected as well. Most important, computerized collection will quicken the pace at which the data gathered by collectors will be incorporated into the national application. This will significantly shorten the CPI time to publication: the final index will be released by the 12th of the following month.¹

**A major transformation of the work of price collectors and clerks**

With computerization, prices and related information are collected by means of an “ultra-portable,” high-autonomy PC equipped with a large, stylus-activated screen.² This true electronic blackboard weighing just over one kilogram (2.2 lb) is easy to use standing up. Collectors use their personal telephones for daily transfers of the collected data via the Internet to the software applications in regional price offices. Naturally, the transmissions are secure (thanks to certificate authentication and the sealing and encryption of exchanged files); connection costs are directly covered by INSEE.

In the price offices, the elimination of data-capture tasks—an inevitable consequence of computerized collection—would have two effects: the refocusing by clerks on the day-by-day tracking of collection operations,³ but also a reduction in the number of clerks. This workforce contraction, in turn, raised the question of the future of regional price offices, or at least of whether a price office should be maintained in each INSEE Regional Office. To avoid an excessive weakening of the regional teams, the Institute decided—in total consistency with the manual collection system, a provisional index would be released on the 12th, and the final index on the 25th.

1. Under the manual collection system, a provisional index would be released on the 12th, and the final index on the 25th.
2. The model selected is a Fujitsu PenCentra 200.
3. However, clerks will continue to perform second-level checks to complement those performed as part of the portable capture procedures. The second-level checks will concern product replacements and the most significant price changes.

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France's national consumer price index is produced monthly from 200,000 prices of goods and services, of which 40,000 are collected on a centralized basis¹ and 160,000 in the field (27,000 outlets distributed across 96 towns and cities of metropolitan France [mainland + Corsica] of 2,000+ inhabitants) by 150 price collectors, nearly all of them freelancers. The national CPI also incorporates indices for the overseas départements (DOMs).²

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¹. Mostly for products with nationally set prices (e.g., transportation, telecommunications, and healthcare).
². There will be no change in DOM index production methods for the moment.

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Courrier des statistiques, English series no. 10, 2004
with the Inspectorate General’s conclusions in 1997—to group the price offices together in a smaller number of Regional Offices called “Site Regional Offices” (hereafter: “Site ROs”).

A new territorial organization

After consultation with regional managers and approval by INSEE’s Committee for the Organization of Statistical Production (DOPS), seven Regional Offices were officially designated as “Site ROs” in 1999: Aquitaine, Bretagne (Brittany), Île-de-France (Paris Region), Languedoc-Roussillon, Lorraine, Nord-Pas-de-Calais, and Rhône-Alpes—i.e., the ROs in Bordeaux, Rennes, Saint-Quentin-en-Yvelines, Montpellier, Nancy, Lille, and Lyon respectively. Each site’s geographic scope was defined so as to optimize the distribution of the total burden while minimizing distances between price collectors and office clerks. The division does not necessarily follow official regional boundaries. For example, the Ardennes département is assigned to the Lille Regional Office, while the other départements of the Champagne-Ardenne region are handled by Nancy. The map opposite displays the resulting allocation of départements among the seven “Site ROs.”

This new territorial organization has narrowed the workload ratio between the smallest and largest price offices from 1:10 to only 1:2. The new teams each have between 7 and 12 clerks, a total staff reduction of about one-third.

A new regional application

CPI production would continue to rely on the combination of two software applications, one at the regional level, the other at the national level. The first would be dedicated to managing collection operations and developing databases containing the collected data. The second would be dedicated to the actual calculation of the index from those data, supplemented with information collected by INSEE’s Head Office through centralized procedures. Naturally, however, the implementation of the IPCR project required the construction of a new regional application integrating the new price collector’s workstation. By contrast, the national application would need only marginal adjustments to link it to the new regional application.

Don’t forget anything

For a Regional Office taking over the work of another RO’s price office, the main task is to integrate into its own regional application the entire information system on which the price collection activity in the other RO was based: information on price collectors themselves (identity, contact dates, availability, etc.), information on quotations (which products, in which sales outlets, in which city, on which day?) and on “specific local practices” (concerning, for example, water-distribution and water-treatment prices, or rental prices for vacation homes), and so on.

A standard description covering all of the information involved was finalized in September 2001 as part of the early transfer of the work of the

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4. All of the IT development work connected with IPCR project implementation was carried out by INSEE’s National Computing Center (CNIP) in Paris.
5. The drafting of this document fell within the scope of the INSEE program entitled “Local Prime Contracting for Work Organization” (Maitrise d’Œuvre Locale en Organisation du Travail: MAIOL).
Limoges RO’s price office to the Bordeaux RO. A few months later, the activity of the Poitiers RO’s price office was also transferred to Bordeaux.

Between September and December 2002, all the other ROs whose price offices were slated for closure compiled similar records and forwarded them to the designated Site ROs. Bilateral meetings between the “absorbing” ROs and the “absorbed” ROs were held in the same period, in particular to allow clerks in the former to meet price collectors in the latter. Naturally, the meetings were also an opportunity to discuss some practical issues, most notably how to determine compensation to be paid by the “absorbed” RO to its collectors for quotations gathered on behalf of the “absorbing” RO. For each transfer operation, a bilateral convention was drafted and signed by the “absorbing” RO and the “absorbed” RO.

Training

The IPCR project inherently entailed radical changes in the job descriptions of price-collection personnel—not only collectors and clerks, as discussed above, but also team leaders and office managers. Training was thus a crucial issue. A training program was developed in 2002 by a working group comprising representatives of the ROs and the two INSEE Head-Office Divisions directly concerned: the Consumer Prices Division and the Training Division.

Training sessions for team leaders and office managers at the Site ROs began in September 2002; the attendees would go on to train the collectors and clerks.

A three-step transition

The transition was scheduled for Q2 2003. For the Site ROs, the switchover from the old regional application to the new one, with the adoption of portable capture, would take place one month ahead of the absorption of the price offices designated for closure. This lead time would be used to familiarize staff in the “old” offices with their new work tools.6

The switchover calendar was as follows: early April, switchover for the Aquitaine, Bretagne, Lorraine, and Nord-Pas-de-Calais ROs; early May, switchover for the Languedoc-Roussillon and Rhône-Alpes ROs, and transfer of price-office activities of the Alsace, Champagne-Ardenne, Midi-Pyrénées, Pays de la Loire, and Picardie ROs; early June, switchover for the Île-de-France RO, and transfer of price-office activities of the Auvergne, Bourgogne, Centre, Franche-Comté, Basse-Normandie, Haute-Normandie, and Provence-Alpes-Côte d’Azur ROs.7

However, some difficulties in the use of the new tools led to the postponement to September 2003 of the switchover for the Île-de-France RO. The decision did not disrupt the transfer schedule (see footnote 6), but it did extend the concurrent functioning of the new and old regional applications to five months from the two initially planned.

New ways of working together

Even more important than the longer “working distances” resulting from the new territorial organization, the new regional application will profoundly change the nature of the relationships between clerks and price collectors, who will now have hardly any opportunities to physically meet. Nearly all data transmission will take place between workstations—from clerks to collectors (for sending out the collection program) and from collectors to clerks (for returning price quotations). Likewise, the exchanges concerning specific problems that may arise will generally be conducted by e-mail. However, to facilitate faster and more direct contacts, all collectors have been issued with cell phones.

On the other hand, the tightening of the network and the new opportunities offered by the new regional application will have a positive impact on the efficiency of the dialogue between regional managers and INSEE Head Office managers in charge of specific economic sectors. In particular, the economic-sector managers will now be able to call up directly on their computer screens the records for price quotations that require checking.

Dominique Guédès
INSEE, Head Office

Dominique Guédès heads INSEE’s Consumer Prices Division

6. There was one special case: the Île-de-France RO, which took over only a single new city, previously handled by the Bourgogne RO.

7. As mentioned earlier, the price-office activities of the Limousin and Poitou-Charentes ROs had been transferred ahead of schedule to the Aquitaine RO.
The “Local Knowledge of the Production System” operation (Connaissance Locale de l’Appareil Productif: CLAP) aims to provide the French business-statistics system with a comprehensive reference base from which data can be directly extracted to produce results at a finely detailed local level. Comparability between geographic administrative units is ensured, and the data can be easily arranged according to customized geographic segmentations. A tool of this kind was needed. It will form a second major pillar of local statistics alongside the new population census (see pp. 5-12).

A pragmatic goal

The aim of the initiative is to build databases of enterprises and local units that can be used directly for local analysis. The databases will rely on existing sources, chiefly the SIRENE register. The units recorded will naturally be managed with the use of SIREN and SIRET numbers. All the units will be present and accurately located. Each will be described with same economic variables conforming to clearly defined principles. It will be possible to conduct quality tests on the results obtained.

To complement the DADSs, already mentioned, the operation will exploit the following sources for employment and earnings: the organizations in charge of collecting social-security and family-benefit contributions (Unions pour le Recouvrement des Cotisations de la Sécurité Sociale et d’Allocations Familiales: URSSAFs) and the Information System on Public-Sector Employees (Système d’Information sur les Agents du Secteur Public: SIASP). The Unified System of Business Statistics (Système Uniifié de Statistiques d’Entreprises: SUSE) will provide accounting data on firms.

Our aim is not to achieve comprehensive harmonization, which would have been over-ambitious. More pragmatically, we have sought to compare these different sources in order to compile coherent information suitable for the needs of local economic statistics. This suitability will be enhanced by tapping the “local public knowledge” of events concerning the production system, most notably by monitoring the local press.

A two-pronged approach

When up and running, CLAP will provide two benchmark databases annually: the "Annual Employment

1. Another particularly valuable source is the "municipal inventory" (inventaire communal), which lists community infrastructure. Income-tax statistics will also be available soon, which can be used to study household income in specific localities.
2. These reports, which employers are required to file with tax authorities and social-security agencies, are an inexhaustible source for studies on earnings and employment. See, in particular, the article by Sylvie Lagarde: "La nouvelle exploitation exhaustive des DADS," Courrier des statistiques no. 85-86, June 1999.
3. Admittedly, some “cleaned” databases do exist, but they cover only a part of the production system: an inter-regional relational database of large local units (BRIDGE) and regional databases for specific industries (such as the OSIDEC observatory of the retail/wholesale trade in the “Centre” region, but there are many others).
4. The SIREN and SIRET numbers are the identification codes for enterprises and local units, respectively, in the SIRENE register.
5. The CLAP system will include an “events database” application for this purpose, currently under development.
Benchmark” (Socle Annuel d’Emploi: SAE) and an “Enhanced Economic Database” (Fichier Économique Enrichi: FEE). The FEE will be generated by adding a small number of SUSE variables to SAE.

The main localized SAE-based statistics will be: (1) the number of local units in the area covered; (2) the total payroll workforce in these local units, and (3) the total compensation of these employees. All three information items will be obtainable down to the most refined level of the French classification of economic activities (Nomenclature d’Activités Française: NAF). The data-retrieval software will incorporate a system for automatically enforcing statistical confidentiality rules. The preferred dissemination channel will be the Internet—specifically, the INSEE website for local-data dissemination. In addition to these standard statistics, the SAE will offer initial indicators for preparing assessments of a particular area: its economic weight, employment trends, leading firms, potential business clusters, and so on.

The FEE will offer supplementary indicators for broadening the area assessments to factors concerning economic growth, international openness, and productive investment. The indicators will be determined by taking into account the entire spectrum of activities of all enterprises operating at least one local unit in the area studied, including those enterprises whose activity extends outside the area.

**CLAP and SIRENE**

CLAP will be a “SIRENE-related application,” with a system for exchanging information between clerks in both applications. In particular, CLAP will allow payroll-employment updates in the SIRENE register. The exchanges will be significant at certain key moments: the introduction of the previous year’s SIRENE updates into CLAP at the start of the year; the incorporation into SIRENE of payroll-employment numbers obtained from CLAP in November (provisional results) and in March of the following year (final results). To ensure concordance between the two sources, the updates will focus on specific points and will be continuous.

**A CLAP team in each INSEE Regional Office**

CLAP will form the hard core of an activity group known as “Local Observation of Local Units and Employment” (Observation Locale des Établissements et de l’Emploi: OLEE). The group will be set up in each INSEE Regional Office (including overseas) and will therefore require the development and maintenance of local competencies for observing the production system.

In particular, a CLAP team will be formed in each Regional Office. A competency center at the Midi-Pyrénées Regional Office will be vested with broad tasks, covering the general management and leadership of the CLAP operation.

**Networking**

A crucial issue—as should be clear from the discussion so far—is the detailed location of production activities, which calls for an enterprise-level approach. CLAP teams will accordingly be assigned to cover entire sets of enterprises, including all of their local units. In other words, if an enterprise operates in several regions, all its local units will be assigned to a single Regional Office. The Office will be required to transmit the relevant parts of its results to each of the other Regional Offices concerned. This arrangement calls for true networking, coordinated by the Toulouse competency center.

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6. The most detailed dissemination level will initially be the municipality (commune). Studies are in progress to assess the feasibility of working at the sub-municipal level to meet specific needs, most notably for urban policymaking.

7. Eventually, some items in the accounts of enterprises with multiple local units may be broken down by local unit; studies are under way to determine whether such estimates are worth preparing.

8. The criterion will be the distribution of the enterprise’s workforce by region. If more than half of the firm’s employees are concentrated in a single region, the firm will be assigned to that region. Otherwise, it will be assigned to the Midi-Pyrénées center.
Knowing where to stop

It would, of course, be unrealistic to strive for “zero default”—both in establishing detailed locations of production activities and in resolving inconsistencies between the sources used in the CLAP operation. We must avoid an excessive scattering of efforts. The priority is to focus on the largest units and set reasonable objectives. Initially, we will rely on a two-dimensional table cross-tabulating the employment area and “NES114,” i.e., level 3, with 114 items, of the Summary Economic Classification (Nomenclature Économique de Synthèse: NES). The quality of the work performed will be assessed cell by cell, using this simple ratio: the numerator is total payroll employment in units for which a serious inconsistency has been detected and remains unresolved; the denominator is total payroll employment in all units combined. Later annual operations will enable these arrangements to be fleshed out and refined.

Goals for 2004

“Initial databases” have already been compiled, and the CLAP operation will be officially launched in October 2003. The first SAEs and FEES are planned for May and December 2004 respectively.

Jean-François Royer
INSEE, Head Office

Jean-François Royer heads INSEE’s Regional Action Department.
INSEE’s strong commitment to expanding regional action programs resulted in a substantial increase, throughout the 1990s, in the number of senior managerial staff (cadres A) assigned to the Studies and Dissemination Departments (Services Études-Diffusion: SEDs) in our Regional Offices. By early 2000, the time had come to look for ways of boosting efficiency, both to cope with the limits on the expansion of our human resources and to better satisfy the needs of our interlocutors. This review—with extensive participation from the entire network—led to the development of the “consistent regional offering” target (Offre Cohérente pour les RÉgions: OCRE). We know that this shift needs to be gradual and long-term, but its strategic orientation and operational framework are now well defined.

Aiming for consistency

Until recently, users may have viewed our dissemination and regional-action network as a varied conglomeration of “front offices” that were very unevenly equipped to respond to demand for products and services. They included the Regional Offices and their Studies and Dissemination Departments, plus the “INSEE Info Service” (IIS) Department at our Head Office. By laying the foundations of the OCRE target, INSEE has resolutely committed itself to a dynamic supply policy aimed at strengthening its regional presence and developing consistent standards of service. The policy rests on a pooling of competencies and on collective investments. It promotes a public-service offering with a distinction between (1) a universal service, available by definition to all users, and (2) a specific service for local communities and other participants in the public debate at the regional level.

Universal service

By universal service we mean making existing information available in the form of standard or customized products; most of our standard products are offered on the Web, via direct access or through online ordering and payment of paper publications and CD-ROMs. Since June 2000, all decisions on the implementation of this universal service, which naturally includes INSEE’s national publication list, are taken by an ad hoc body: the Customers and Products Committee (Comité Clients-Produits: CCP).

Initial efforts focused on developing our marketing activity. In particular, we set up a competency center to drive this function in late 2001 at the Studies and Dissemination Department of the Strasbourg Regional Office. One concrete result was the November 2002 launch of a twice-monthly electronic newsletter, Insee.net actualités, which complements similar bulletins launched by a few other Regional Offices.

A further, crucial advance will be the establishment of a new entity, INSEE Contact, which will handle all of the 200,000 inquiries received each year by the Institute (by mail, fax, phone, e-mail, etc.) and channel them toward the right standard product or, failing that, the appropriate unit if a customized response is indicated. INSEE Contact will consist of three closely inter-related competency centers—two at the regional level, in Rouen and (again) Strasbourg, the third at our Head Office’s IIS Department. The system should be fully operational by end-2004. By consolidating most of our welcome and guidance functions in INSEE Contact, we will free up the resources needed to activate or reactivate complementary channels for accessing statistical information. This will be done via intermediaries providing localized services to specific user groups (see box p. 28).

1. This newsletter comes in addition to INSEE Actualités Magazine, a general-information bulletin published since 1998 by the Marketing Division of INSEE’s Head Office (five issues a year), distributed through free subscriptions.
2. Naturally, our overseas Regional Offices will be associated with INSEE Contact operations via appropriate links.
Developing a network of intermediaries

Revaluing child support, assessing the odds of success for a business creation—these are just two examples where people looking for an answer will find a complete service at advisory bodies that regularly receive fresh data from INSEE under the terms of a long-term partnership.

INSEE Contact will systematically redirect inquiries to these bodies, whose list will be kept up to date by our Regional Offices. INSEE Contact will also invite persons without Internet access to use the services of the many public access points.

Specific service to participants in the regional public debate

Alongside a universal service for all user categories, INSEE intends to develop more specific capabilities to fulfill the expectations of local partners, including local authorities, decentralized government departments, and representative organizations and groups.

The aim here is not to make existing information available, but to produce truly fresh material: new publications, new studies, and even new data. Admittedly, this is a routine public-service activity. Here, however, the results come in the form of a product lineup. This is an essential change. Moreover, the offering is adequately “tooled” thanks to prior investments.

How should the lineup be put together? In practice, a Regional-Action Steering Committee (Comité d’Orientation pour l’Action Régionale: COPAR) is in charge of recording the needs expressed, assessing their scope, and deciding which tools to develop. The supervision of these investments is generally delegated to a Regional Office director; their implementation is entrusted to a “Regional-Action Service Center” (Pôle de Service pour l’Action Régionale: PSAR), in association with one or more front offices.

Thus far, six PSARs have been set up in six Regional Offices, each specialized in a particular approach. Their initial output has already been abundantly exploited by many front offices. As the number of these investments grows, the provision of the “specific service” will become a major activity in all Regional Offices. This ongoing relationship with our partners will also enable us to stay abreast of the latest trends in local demand.

To strengthen the system, we have also planned two “statistical engineering” centers, respectively in charge of enterprises and households. Their mission will be to assist front offices in developing a new survey or a new statistical processing procedure for an administrative source: the first center was set up in Nantes in September 2002, the second in Rennes in September 2003.

Collective work and project-centered work

The major structural reorganizations outlined above are merely the enactment of the “common sense” principle that informs the construction of the “Consistent Regional Offering” (OCRE): pooling our analysis and actions to achieve greater collective efficiency.

Henceforth, as outlined above, the network will take collective decisions about its universal-service and specific-service policy in CCP and COPAR meetings. If needed, other INSEE units concerned will participate. Policy implementation will also be guided by a consultative, coordinated approach. Pooling of competencies will also be the rule in regional front offices. It will transcend the barriers that often divided the Statistical Departments (Services Statistiques: SESs) and SEDs—and, within the SEDs, between research staff and dissemination staff. If we want our local product lineup to reflect local reality, it must be comprehensive and displayed as such. In the same spirit as the network when making its investments, the quest for responsiveness and efficiency is leading some front offices to translate their partnerships with players in the public debate into structured projects.

Such teamwork methods are not new, of course, but we have adopted them as core principles for the functioning of the entire network and of each front office. This will drive the current changes, most notably by allowing the preparation of local, multi-topic summary studies. Experience-sharing will also promote new advances to ensure the theoretical and practical relevance of methods implemented and enhance the intrinsic quality of the results obtained.

Cooperation with Ministerial Statistical Offices

The preparation of the first “specific-service” investment program in 2002 relied on an analysis of local issues. However, the Ministerial Statistical Offices (MSOs) (Services Statistiques des Ministères: SSMs), including those with regional representation, had not effectively been involved in the exercise. The possibility of cooperating with MSOs to work toward the OCRE goal has often been mentioned, and is now the subject of an exploratory mission at the behest of INSEE’s Directorate for Dissemination and Regional Action. The mission is charged with three tasks: (1) to assess the various cooperative ventures undertaken until now in the official statistical system (on a one-time or long-term

3. Of course, this new material will be incorporated into the “universal service” as soon as it is released.
basis, whether successful or inconclusive); (2) to gather ideas and proposals from MSO heads; (3) to deepen the dialogue with regional and local administrative bodies. Another, broader forum for reflection is the preparation of the 2004-2008 program of the National Council for Statistical Information (CNIS) by its “regional and local statistics” task force.

This exploratory phase is expected to lead, in the short or medium term, to the definition and implementation of new forms of teamwork that should enhance the regional and local complementarity of INSEE and MSO activities. This interaction is already very tangible at the national level, but still not adequately realized by statistical-information users. Proposals to remedy this lack of exposure were put forward recently at routine working sessions between INSEE and MSO managers. One example is the co-publication, in the same series, of books for a general audience distributed in an identical set of bookstores. A more advanced project—with an initial rough implementation scheduled for 2004—concerns the opening and development of a full-fledged Web portal for French official statistics.

Michel Jacod
Director of INSEE’s Dissemination and Regional Action Department

4. One example that comes to mind here is the very recent series Références, which already comprises all of INSEE’s flagship publications, such as Données sociales, Tableaux de l’économie française, and La France et ses régions.
At a very early stage, INSEE strove to adapt its organization and operating principles to emerging challenges. The “INSEE 2004” program enabled us to examine our core skills and the processes we use, in order to define a medium-term target. This ambitious initiative produced a shared strategy and a powerful synergy. We set up a special steering system to take better account of the tradeoffs between operational scope, costs, deadlines, and quality. The purpose was to achieve successful change, but also to promote a results-oriented culture in our management. These issues strongly shaped the guidelines of the “project steering and management control” initiative launched in 2001.

A comprehensive initiative that everyone has a stake in joining

The initiative seeks to identify ways of making progress in the oversight of our activities and in management dialogue; it also aims to introduce task-sharing and even changes in our management practices. It contributes to the success of INSEE’s transformation program, to be completed by 2004. The program is characterized by new forms of organization based, in particular, on expanded networking, greater operational interdependence, and a shared-responsibility system. This will necessarily entail a more accurate steering and more explicit tradeoffs in terms of costs, deadlines, quality, and operational scope. The initiative also ties in with broader changes driven by the modernization of public management. These include decentralization, delegation of authority, empowerment, transparency, management by objectives, and a shift toward a results-oriented culture.

The examination of the processes leading to the development of INSEE 2004 enabled us to identify the changes that should be implemented on a tight schedule—the tightness being mainly due to the choice of 2004 as the first year of the redesigned population census (Recensement Rénové de la Population: RRP). Projects such as the continuous labor-force survey and the RRP alter the pace of our work quite significantly and require an approach to production firmly focused on working to schedule. At the upstream stage, the success of the redesigned census depends heavily on the possibility of generating the necessary resources, and hence on the productivity gains that will be obtained from all our “structuring operations” (such as the new census) and thanks to a new organization of statistical production. All this argues in favor of a special approach to project steering in the context of INSEE 2004 (see the article by Pascal Rivière, pp. 35-38).

Project steering and management control are developed using an approach that is both general and local, centralized and decentralized. It is a long-term approach, although we must take some steps quickly to help reach our short-term objectives.

The first actions to be taken accordingly focus on improving management procedures and general management tools:

- preparation of “INSEE orientations and objectives” and the system for measuring the relevant results;
- changes in procedures used to program activities over three-year periods, to define the “annual work plan for Regional Offices,” and to prepare the budget and the “INSEE financing plan”;
- continuing search for a better match between INSEE needs and the results of staff mobility programs;
- progress in managing our markets.

Various working groups have determined a consistent set of actions and “pathways to progress” so as to allow steering procedures that are tailored to each situation, offer maximum operational efficiency, and are directly useful. Some procedures must be harmonized, and the overall steering has been made more cross-sectional in order to enhance the relevance of the information produced.

A management seminar to set guidelines for the initiative

An enlarged management seminar, held in early 2002, enabled the INSEE management committee not
only to assert its resolve to fully implement the initiative, but also to arrive at a shared vision of the pathways to follow, on the basis of a prior assessment of existing conditions.

The guidelines developed in the seminar cover four areas:

**Strategy:** Need to improve legibility and communication of INSEE strategy (“INSEE 2004” program, construction of European statistical tools, etc.).

**INSEE 2004 projects:** Operational steering for deadlines, resources, quality... and unfinished business.

**Overall steering:** Overall steering of resources, priorities, and deadlines; allocation mechanisms:

- for the main aggregates, by improving existing tools in order to derive synthetic elements;

- for cross-sectional issues, the goal is to release information every two months with the aid of annotated indicators (based on information sent by project “owners” and operations managers).

**Methodology:** Construction of consistent classifications and procedures, and of methodological tools to support them (costs, rules, valuation, imputation, distribution keys, etc.).

Naturally, INSEE 2004 counts as one of the four areas in its own right because of the changes it entails and the number of parties involved, and also because its success requires very strict control, particularly in terms of meeting deadlines.

**Priorities of project steering and management control at INSEE**

The steering committee appointed for this initiative determined the set of priority actions: (1) to improve our knowledge of costs, consumption, and time spent, and to use this information to improve our resource-allocation procedures; (2) to bring our contract-bidding procedures more closely in line with our priorities; (3) to promote the routine use of steering instruments at all levels; (4) to manage more effectively the process of developing and adjusting our strategy so as to fulfill our missions; (5) to rely more heavily on the priorities defined for our missions and strategy in order to achieve a better allocation of resources.

**A structure for steering the INSEE 2004 program**

Given the strategic importance of this program, its operational scope, and the number of participants, we set up a ramified steering structure.

An overall steering committee for INSEE 2004 is in charge of (1) general management and taking decisions that will impact the objective, and (2) assessing the risks taken and the results achieved.

We have also set up five “thematic” committees.

**Committee no. 1: overall project.**

This committee scrutinizes the overall project with a focus on project interdependence, schedules, and the information system. Its task is to identify the projects and assignments to be undertaken, and the elements that need to be gathered and put into shape as inputs for the steering committee. Each “structuring operation” for INSEE 2004 (redesigned population census, SIRENE 3, redesign of consumer price index, and so on) is tracked with a monthly report card—a true “dashboard” summarizing project progress, the impact on Regional Offices, and the risk assessment.

**Committee no. 2: change and human resources.** This committee is in charge of studying the occupational effects and, in particular, the workload transfers for Regional Office staff. Within this framework, it addresses management-control issues in order to define the tools that will allow efficient management of these human-resource balances with regard to project scheduling and status in a given Regional Office.

**Committee no. 3: organization and functioning of INSEE units.**

The organization adopted for INSEE 2004 is based on networking. One of the tasks of this committee consists in inducing the players involved to establish more contract-based relationships and to take on greater responsibility. The goal here is to enhance operational performance through a respect of reciprocal commitments—which requires a more aggressive form of management by objectives than before.

**Committee no. 4: evolution of management.**

The term “management” covers several areas here: administration, programming, organization, project supervision, strategy, and communication concerning work performed, teams, and staff. The main priority is the career development of mid-level managerial staff (a hierarchical level just below the executive committee composed of the Regional Office director and his/her three senior managers [chefs de service]), i.e., typically the “Division heads” (chefs de division). However, the committee
must also examine team leaders, taking a broad view that encompasses the executive committee and all other staff. The specific operation of management teams will also be reviewed later.

Committee no. 5: information and communication. The communication objectives are to inform staff of the INSEE 2004 aims, to reassure them about planned changes, and to motivate them.

Committees 2, 3, and 4 completed their missions in early summer 2003.

Work performed

The steering work began with the identification of “structuring operations” for the INSEE 2004 target, and of the tasks and players involved. This set of items is covered by a planning program specifying workloads and schedules, and by continuous monitoring based on consumption, reforecasting, and the identification of intermediate output. We are making a special effort to define interactions and links between tasks so as to identify risks and manage them better. Also, we are implementing a specific tracking system for procurement procedures in order to bring their preparation timing under tighter control, in keeping with our priorities.

Lastly, our steering has been firmly focused on compliance with schedules. This has had two consequences: (1) a re-examination of the target operational scope of certain projects so as to adjust them to the strict necessary minimum, even if this entails postponing some developments to later versions (evolutionary process); (2) decisions to reallocate resources to tasks that are a priority for INSEE.

All these endeavors were facilitated by clarifying participants’ responsibilities in the organization set up, and by the desire of INSEE managerial staff to engage in cooperative work.

Several initiatives help to promote the adoption of INSEE’s new operating arrangements:

- a study on the work programming procedure in our Regional Offices aimed at improving management dialogue between our Head Office and regional units, and at relying more heavily on the annual work plan as an activity-monitoring tool;

- a report on organizational and operational links between Head Office units and national competency centers located in our Regional Offices. The aim is to develop more effective contract-based relationships between these units based on (1) agreements that formalize annual targets and associated indicators, and (2) systematic annual meetings to review current-year target fulfillment and set new targets for the following year;

- establishment of linkage between successive programming procedures so as to arrive at an overall view of costs and make better-informed commitments of resources;

- development of a 2003 training program on steering and management control for unit managers and operation managers.

The work of committee no. 4 has led to the recommendation that procedures and tools deemed relevant for management tasks and, more specifically, steering tasks should be made available. Regional Offices were asked to prepare their own management-enhancement plans by end-2003.

INSEE 2004 has led to a reappraisal of priorities for “structuring operations.” To achieve better compliance with increasingly tight deadlines, we have, in some cases (e.g., the population census and the SIRENE business register), adjusted the operational scope in order to focus our efforts on the core of these operations—even if this means deferring functions not vital to start-up, such as the implementation of “value analysis” approaches. This involves a radical cultural change for INSEE’s senior management as well as for operation designers. The latter will need to aim more explicitly than in the past for a level of quality compatible with time constraints and available resources. Likewise, production participants will have to cope with new work paces, characterized by greater seasonality and increased “multi-activity,” which must be steered with special care over the long term.

Steering requires greater overall cohesion. The procedures and tools already exist. We must now maximize their value so that each player can benefit from these advances for his or her specific purposes. We should also promote the spread of a common culture centered on these issues.

Denis Rogy
INSEE, Head Office

Denis Rogy is Deputy Head of INSEE’s Programming and Management Department, in charge of developing project steering and management control.
In late 2001, INSEE launched an ambitious program called INSEE 2004, comprising a set of projects designated as priorities. Most of these were given formal deadlines to which the Institute committed itself. Strictly in terms of information technology (IT), five projects were concerned: the redesigned population census (Recensement Rénové de la Population: RRP), the SIRENE 3 business register, the redesigned consumer price index (Indice des Prix à la Consommation Rénové: IPCR), the “Local Knowledge of the Production System” operation (Connaissance Locale de l’Appareil Productif: CLAP), and the “consistent regional offering” target (Offre Cohérente pour les RÉgions: OCRE). It is hardly unusual for INSEE to embark on such ambitious, innovative projects. With INSEE 2004, the novelty lies in the fact that several far-reaching projects are launched simultaneously, with “real” deadlines leaving no room for maneuver.

The deadline variable has now emerged as a very powerful constraint, and the INSEE 2004 operation thus gives a new cross-sectional and inter-departmental dimension to project management. As a result, “deadline-driven steering” has gradually become a necessity for project teams, and has triggered a change in habits and attitudes throughout 2002. In this article, we draw some lessons from these initial experiences.

**Meeting deadlines**

Let us begin by trying to define the issue. A project is characterized by goals, the resources (human and financial) to achieve them, and a schedule to be complied with. Naturally, none of this is carved in stone. As a rule, goals change, sometimes imperceptibly but steadily, sometimes occasionally but radically. Meanwhile, resources may be adjusted, and schedules are not always a cast-iron constraint.

But if we set ourselves deadlines, as we did for every “INSEE 2004” project, one of the degrees of freedom disappears. Slippages are no longer allowed: if problems emerge, we must do what it takes to meet the stated deadline. The two main variables on which we can act are (1) the scope of the project and (2) the volume of resources applied. As a last resort, we will have to quicken the production start for the IT application, but with all the risks inherent in early deployment (as discussed below).

If we adopt an economic rationale, it becomes clear that we have a fourth instrument for action: productivity. Assuming constant resources, a constant workload, and a set deadline, productivity is indeed a self-evident adjustment variable. But while we can decide to apply more resources, to reduce the number of functions offered by an application, to shorten the test phases or “commissioning” phases (acceptance/inspection), it seems hard to decree an increase in productivity (even though we can “rush” to meet a deadline). From this standpoint, productivity is not, strictly speaking, a steering instrument. That does not stop us from trying to boost it, but the process will unfold on a longer time scale (a more effective organization of development work, use of business components, calling on well identified experts for specific aspects, and so on).

Lastly, we should note that the “deadline” parameter, chased out the door, returns quickly through the window. True, in practice, we set a deadline for production start, but this often concerns only a portion of an application, or an application that is bound to undergo further evolution. We thus enter into a logic of deliveries distributed over a period of time, with the heaviest pressure on the first deliver(ies), covering the first deliver(ies), covering the

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1. This approach ties in with the concept of allotment, which consists in carving up a project into successive lots, each with its own consignment date. A survey, for example, will comprise a “sampling” lot, a “collection management” lot, a “data capture” lot, a “checking” lot, etc.
priority functions. Yet the problem remains: we need to meet a deadline. In the following sections, we will take a closer look at the characteristics of the three action tools listed above, and their practical advantages and drawbacks.

Narrowing the project scope

This is the first idea that comes to mind: to stay on schedule, let’s limit the project to the strictly necessary.

The scope of INSEE 2004 projects—in particular, that of the most time-constrained—has been almost invariably narrowed. And what do we discover in practice? An important and not intrinsically obvious fact: it is not because we do fewer things, in a shorter period of time, that the result is necessarily of inferior quality. The search for a minimal scope leads us to consider the project’s true goals, what is important and what is not. This exercise forces participants to clarify the project, to make it legible and comprehensible; inevitably, they remove the minor additional functions by refocusing on essentials. The project acquires the qualities of restraint sometimes left by the wayside, and the effect is thus often positive. The stripped-down application will be more evolution-friendly and easier to maintain.

Naturally, once the scope is defined, the project team will endeavor to monitor workloads and planning as rationally and rigorously as possible, so as to determine continuously whether the project is running “on time” or not, and if additional resources are needed or not.

Increasing internal resources: not so easy

The six-month “dashboard” of indicators managed by the Programming and Management Department provides a way to define the resources allocated and to prepare planning schedules. However, in project terms, all this concerns the IT part only. Moreover, the resources in question are only “on paper”: hirings take place through staff mobility programs, which are typically scheduled once a year. However, there are also quarterly rotation programs within each national computing center. That is why it is less difficult to obtain resources on the IT side than on the “project owner” side, especially during the year. Another reason for this difference is that a large part of an IT staffer’s work is defined by the technical tools employed, and if these resemble one another across projects, it will make reassignment easier.

Nevertheless, many IT workers are already involved in projects or applications maintenance, and therefore have no time to devote to another project—or, if they do, only sporadically. In addition, resources are not so readily interchangeable, most notably on account of the technical expertise needed for certain applications (mastery of Java programming techniques, or specialized knowledge of the Oracle database management system). The opportunities for resource reallocation may therefore turn out to be more limited than they appear.

In practice, therefore, we observe a lack of flexibility in the reallocation of human resources, particularly of staff working on the "project owner" side: it is very difficult, if not almost impossible, to hire a new statistician for a statistical-project team in mid-year. In other words, outside of the staff-rotation program (which forces project managers to plan several months ahead), there’s no hope in sight. At the same time, the lack of “specifier” statisticians has a tremendous impact on schedule compliance: if there is only one statistician to deal with a team of IT staff, and if he or she does not have time to write specifications for everyone, the quantity of IT resources implemented becomes useless ipso facto. In sum, we face a general problem of resource synchronization. On the other hand, the resource “yield” depends heavily on the project stage at which the resources are applied. Consequently, the appointment of an IT-organization project leader at a very

An approach that should be generalized

The hunt for the superfluous is informed by a sound management principle that applies to any operation besides classic IT projects—for example, surveys and studies. Of course, the approach requires a highly detailed analysis of all the tasks involved—a comprehensive description of the production process—in order to determine possible sources of savings. And for each task, we must ask the iconoclastic question: if we eliminate it, what happens, what will be the consequence? Often, we realize that many of the tasks are actually useless: the simple truth is that they are performed out of habit, because of organizational inertia, because “that’s how we’ve always done it.” One conspicuous example was the implementation of a Total Quality Management (TQM) approach at Statistics Sweden in 1993. The efficiency of these Total Quality programs, which require a minimum of intrusion in each participant’s work (to understand what is going on), will naturally be proportional to their acceptance by the players.

early stage—when the project outline is not really defined—often turns out to be inefficient.

**Outsourcing**

Another way to meet a need for greater resources is, of course, outsourcing to third parties for assistance to project owners or prime contractors. The first option requires, in any event, high availability from the project owner. The second option may allow the resolution of some situations in highly specialized areas (relating to new technologies) that are not yet fully mastered. Owner assistance can also be valuable at the very start of the operation, in order to put the project team on the right track—especially when it needs to work with new tools or a new architecture.

Here as well, though, we observe a relative lack of flexibility due to public procurement procedures. If the sum is large enough to require tendering, the drafting of specifications and the multiplicity of “checkpoints” inevitably requires a time frame of at least six months, in most cases. This totally precludes immediate responsiveness. Below the €90,000 threshold, we can use a less constraining order-form procedure, but we are still required to obtain quotes from several suppliers—generally, at least three. Moreover, the same competitive-bidding rules bar us from consistently using the same supplier, even if we are fully satisfied with its services. Despite these restrictions, it is fair to say that with a good organization, and if the sums are modest, we can outsource fairly quickly.

**The sensitive issue of quality**

The quality of a product or service—if we confine ourselves to this broad definition—consists in its capability to satisfy users’ explicit or implicit needs. For an IT application, “quality” means making sure that it effectively provides the desired functions, and that the tool can be used in acceptable conditions. For these aspects, the crucial phase is post-development. Indeed, contrary to what one might think, a project does not stop when the development work is done. The unfinished business includes testing, commissioning, deployment, documentation, and training. Experience shows that about three to six months are requirement between the end of development and the actual start of production.

While quality is not a parameter that we can act upon in a rational manner, at a conscious level, it does turn out to be an adjustment variable ex post. If the need to meet the deadline requires us to shorten the time to production—for example, by skipping tests or cutting down on the documentation work—we are actually undermining the quality of the application. It will be less reliable and less robust, and behave in ways that we will be unable to explain properly. And, almost inevitably, problems will arise that we should normally have detected earlier but that we will be forced to address in the very middle of the production phase—with all the resulting inconvenience (and additional cost).

The practical lesson to be drawn from all this, therefore, is that the production phase of an IT application is very difficult to prepare. Hence the need to plan more carefully for the production start-up, especially in an environment made more complex by the invasion of new technologies.

**A new mindset**

Deadline-driven steering has now been implemented in several major INSEE projects. This approach sometimes puts project teams (IT people and statisticians) under heavy pressure, especially toward the end, when the unexpected happens. It is still too early to draw lessons from this initiative, but we can already say that it has been an excellent experience for INSEE.

It highlights our capacity to work and act collectively and efficiently at an intensive pace—but also, at times, our limited flexibility in resource reallocation. It also reveals how hard it is to estimate loads and to draw up schedules. Effective deadline-driven steering requires a shared awareness of what determines project times.

Deadline-driven steering and the analysis that it requires also shed

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3. Despite changes in French public procurement legislation since the time of writing, the complexity persists.
4. The variety of methods to learn and master, the greater number of heterogeneous production processes that are more complicated to test, security issues, and so on. Furthermore, the lack of experience with the new architectures makes load estimation more difficult, owing to the large number of small unexpected technical glitches that arise over time, when the project reaches the “touchdown” stage.
light, in retrospect, on why some projects take so long to complete. One of the main reasons is the degree of detail of the desired functions, as no restraints are placed on users’ wish lists. Deadline-driven steering makes such restraints mandatory, and forces designers to engage in a clarification whose consequences can only be beneficial in the short run (visibility, control) and in the long run (easier maintenance).

It also involves a change of mindset. Within the framework of the project, we have to focus on determining the real need, the real deadline, the real priorities, and the real costs. Beyond the project, all this can only lead us to an effective, more relevant, and more aggressive steering of the organization of our statistical-production work and, more generally, of our Institute's overall operations.

Pascal Rivière
INSEE, Head Office

Pascal Rivière heads INSEE's Applications and Projects Department
INSEE's Regional Offices (Directions Régionales: DRs) are very heavily involved in “INSEE 2004.” The core of the program consists of large-scale “structuring projects”: the redesigned population census (Recensement Renové de la Population: RRP); new applications for collecting consumer prices and for the SIRENE register of enterprises and local units; and the software application for the “Local Knowledge of the Production System” operation (Connaissance Locale de l’Appareil Productif: CLAP). Their implementation effectively requires setting up entirely new organizations in each Regional Office, between Regional Offices, and between the latter and the Head Office. There will be major effects on external relations—most notably with municipalities—for the preparation of the new census. The program will also have a broader impact on all the players in regional public affairs, for whom INSEE plans to develop a relevant and more effective service offering.

**Territorial reorganization and workload transfers**

One of the first tangible effects of INSEE 2004 on our Regional Offices is the concentration of the “consumer prices” and “SIRENE” applications in a smaller number of units—respectively seven and ten “Site Regional Offices” (in French, “DR-sites”). The transfers of the related workloads have been programmed and organized by INSEE 2004’s Project Committee no. 1 (“overall project”), whose outstanding coordination work has given the Regional Offices a good visibility. However, the announcement of the coming restructuring operations caused genuine concern in some Regional Offices whose “price offices” or SIRENE teams were slated for closure (the SIRENE shutdowns being viewed as more consequential). The response called for a unified mobilization of all of the Institute’s human-resources management instruments: communication, support from our career counselors, customized training and staff-mobility programs, and establishment of ad hoc procedures such as tutoring and “discovery internships” to facilitate reassignments. Similar actions were also undertaken in the “Site Regional Offices” but in an obviously different context.

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1. The reorganizations discussed here concern metropolitan France (mainland and Corsica) only.
2. A similar rearrangement (with a consolidation in eight “Site Regional Offices”) had already been implemented in 1998 for the application called “Computerized Feeding of Register of Natural Persons” (Alimentation Informatisée du Répertoire des Personnes Physiques: AIREPP). This included the production of vital statistics, the management of the National Identification Register of Natural Persons (Répertoire National d’Identification des Personnes Physiques: RNIPP), and the management of voter rolls.
An asymmetrical phenomenon

The INSEE 2004 program entails workload transfers along with application redesigns. However, the phases are not always synchronous. The transfer may take place before the new application’s actual start-up. This is notably the case for most SIRENE transfers.

Such a situation generates tension for the newly designated “Site Regional Office,” which is obliged to implement a greater volume of resources than when the new arrangement reaches cruising speed—which will not be happen until complete delivery of the application involved. This creates an asymmetry between “absorbing” Regional Offices (i.e., the “Site ROs”) and “absorbed Regional Offices”: in a sense, the latter benefit sooner from the productivity gains generated by the application because of the “workload transfer” toward the “absorbing” ROs. The imbalance can be corrected by shortening the time between the workload transfer and the application start-up. But the “absorbed” RO can also help to improve the situation. A concrete example is that of the updating documents for the SIRENE register forwarded to INSEE by the “Business Formalities Centers” (Centres de Formalités des Entreprises: CFES). In practice, SIRENE transfers have provided the opportunity to quicken the computerization of document transmission—to the benefit, therefore, of the “absorbing” ROs but thanks to the efforts of “absorbed” ROs.

1. Typically, projects are carved up into successive lots, each with its own delivery date.

In practice, each transfer operation is backed by a contractual agreement between the parties involved covering the transferred activities, the schedule, appropriate communication initiatives, task allocation on an ongoing basis between the “absorbing Regional Office” and “absorbed Regional Office,” and so on. The agreements are signed by the heads of the Regional Offices concerned, the “project owner” for the application involved, and INSEE’s Programming and Management Department (Département de la Programmation et de la Gestion: DPG). The preparation of these documents has provided a wealth of lessons by allowing Regional Offices to lay out their different practices and—in so doing—to introduce greater homogeneity. The overall balance is distinctly positive. True, the situation has not yet fully stabilized, and some transfers have not yet been carried out. We will have to wait until the redesigns have been fully implemented before making a more comprehensive assessment that will take into account the links between transfers and the productivity gains expected from these applications.

Overview of application “landings” in Regional Offices

Setting aside the new census, the core of INSEE 2004 consists of three major projects: SIRENE 3 (register of enterprises and local units), the Redesigned Consumer Price Index (Indice des Prix à la Consommation Rénové: IPCR), and the “Local Knowledge of the Production System” operation (Connaissance Locale de l’Appareil Productif: CLAP). All three have been described in the preceding articles. To simplify somewhat, we can say that the new applications seek a maximum automation of the process for inputting primary information, as well as of their processing and initial edits. This allows us to concentrate resources on the expert analysis of results thanks to selective, judicious choices. In this sense, productivity gains are indeed reinvested to the benefit of the application itself, and not only into other projects such as the new population census: productivity is reinvested in higher quality.

This mechanism has major implications for the Regional Offices. First, it implies a new approach to primary information. For prices, the switch to computer-aided data input (CADI) entails a profound change in the price collector’s job but also that survey clerk (see the article by Dominique Guédès, pp. 19-21). For the Site Regional Offices, this has two concrete consequences: (1) the development and implementation, before the switchover, of intensive training sessions, particularly for price collectors; (2) an all-out mobilization of the management team to address problems arising in the field. These difficulties, largely of a technological nature, were intensified by the need to complete the transfers quickly in the wake of the switchover. While the collection function was genuinely improved, the same did not happen in the management function. Reaching true stability will take several months. For SIRENE (see the article by Nicole Chazelas and Hugues Picard, pp. 13-17), upstream automation will necessitate (1) a far greater dematerialization of declarations concerning enterprise creations, modifications, and terminations transmitted to INSEE by the “Business Formalities Centers” (Centres de Formalités des Entreprises: CFES) and (2) a near-instantaneous return to CFES of the identification numbers and principal activity codes (Activité Principale Exercée: APE) assigned to units (enterprises or local units) newly entered in the register. These steps will substantially reduce the administrative burden. The focus of the relationship between the CFE and the SIRENE clerk will thus shift from producing status notifications to processing “problem” information. The CLAP operation is based on a collation of the main national primary

3. For prices, one of the more crucial aspects to be formalized is the cooperation between the absorbing Regional Office and absorbed Regional Office for the management of the price-collector network.
sources for the production system, chiefly the SIRENE register and employers’ annual declarations of payroll data (see Jean-François Royer’s article, pp. 23-25).

The Regional Offices will then need to manage the occupational transition from clerk to quality expert. This is a critical challenge for the years ahead. True, such transitions have already been carried out in some Regional Offices, but they do not display the two features characteristic of the new applications: (1) a quality expertise that forms the core of the clerk’s job and (2) most important, an expertise supported by procedures integrated into the applications. That is why the applications include structured documentation systems (metadata), which become indispensable to the clerk. However, once the technical training has been provided, the unresolved problems mainly concern team organization and leadership, information flows, the establishment of a consultation process between staff, and so on—as the operation entitled Re-examination of Individual Schedules (Reprise des Bulletins Individuels: RBI) for the 1999 population census showed. Quality is, in effect, another way of working, in which quality targets are explicitly declared and the necessary resources are applied to track and measure their fulfillment.4 The evolution of the clerk’s job description toward that of a statistical expert thus incorporates a managerial dimension that is particularly critical for middle management. This observation applies not only for the price index, SIRENE, and CLAP, but also for many other INSEE applications such as EPURE (extension of the URSSAF project for incomes and employment) and the quality management of civil registration forms in the AIREPP workstation (see footnote 2).

Implications of the new census

The population-census redesign is the flagship project of INSEE 2004, the one around which all the others revolve. Alain Godinot’s article (pp. 5-12) describes its legal, technical, and organizational aspects very clearly. For our Regional Offices, the implications are both internal and external.

Let us begin with the external issues. The goal is to establish a new task-sharing with municipalities, since they are legally responsible for planning and executing the census surveys.5 Concretely, this means that they need to set up a (municipal) team to monitor the collection process, conduct a local communication campaign on the census, hire enumerators, help to train them and supervise their work, provide the physical and logistical resources needed for effective collection operations, transmit information to INSEE, perform checks during collection, conduct end-of-collection operations, and so on. These tasks rely on a partnership with the Regional Offices. They are repeated annually in municipalities of more than 10,000 inhabitants. Obviously, before such an arrangement is implemented, it must be explained to municipalities and discussed with them. That is why our Regional Offices and Head Office have launched extensive consultations, reaching maximum scope in 2003. This is a decisive step in the redesign, for municipalities need to grasp as early as possible the importance and novelty of their role.6 Naturally, these consultations are an opportunity to explain the technicalities, goals, and benefits of the redesign. They mark the point at which quality management is also imperative to enhance work content and alleviate the monotony of applications that, by automating processes to a maximum, would otherwise result in desperately uniform tasks (processing of anomaly lists).

The MAIOL approach

One point should be emphasized regarding the prerequisites for the regional introduction of the new INSEE 2004 applications. All the applications have been developed in continuous consultation with (1) a regional officer called the “organization leader” (RESSO for responsable organisation), speaking on behalf of all Regional Officers, and (2) an “assistance entity” combining representatives of several specialized units at INSEE’s Head Office: the “Support and Organization of Production Methods” Division, the Human-Resources Deployment Unit, the Training Division, and the Working-Conditions and Workplace-Action Team.

This approach was launched in 1997 under the label MAIOL (Maîtrise d’Œuvre en Organisation Locale du Travail, i.e., “Prime Contracting for Local Organization of Work”). It represented a major advance for our Regional Offices, both in preparing for change and in appropriating the new application at start-up. However, there are limits to the approach if it not linked to targeted staff-support processes. In this sense, the organizational arrangement specified by MAIOL remains inadequate if it fails to allow for the complexity of the transition from predefined staff roles to those they will actually be able to perform. MAIOL should therefore be combined with a method such as INSEE’s “Description des Activités et des Compétences” (DAC), in its two facets: description of activities and description of competencies. And, of course, for the applications to make a successful “landing” at our Regional Offices, they must undergo sufficient pre-delivery tests.

4. In this sense, quality management is also imperative to enhance work content and alleviate the monotony of applications that, by automating processes to a maximum, would otherwise result in desperately uniform tasks (processing of anomaly lists).
5. The law stipulates that the census may be executed by a public inter-municipal cooperation agency (Établissement Public de Coopération Intercommunale: EPCI). Our discussion is confined to single municipalities—by far the most common situation—but our remarks are equally applicable to EPCIs.
6. The consultations also cover the process of expert review of the “Localized Buildings Register” (Registre d’Immeubles Localisés: RIL), a database of addresses for municipalities of 10,000+ inhabitants, which further underscores our comment on the municipalities’ role.
which municipalities begin to form partnerships with the Regional Office and the first problems can be spotted.

Another key stage in the implementation of the new census is the formation of the supervisory team. Because of their triple mission—advice/support, training, and inspection—they are our key interlocutors for the municipalities. The number of supervisors in each Regional Office is determined by the division of the regional territory into supervision areas, each being generally assigned to one supervisor. Now a decisive factor in defining these areas is the proportion of municipalities of fewer than 10,000 inhabitants to be enumerated each year. This has created some heterogeneity in the sizes of supervision teams in different Regional Offices. In principle, supervisors are hired on a volunteer basis in all units of a given Regional Office. But their inter-unit distribution must not impair their capability to perform their other tasks. The formation of the supervisory team therefore requires a prior review of the conditions in which specific missions are carried out. Can the mission be delayed or spread out over time? How high is its priority? Can it be reassigned to other team members or other units?7 This review is especially critical because of the two key characteristics of supervision: seasonality (October to end-February) and annual recurrence. The goal is to establish a full-fledged internal network at the Regional Office, and then to manage it, lead it, and secure its acceptance alongside other RO tasks. This management-centered challenge is all the more complex because the supervisor is, above all, a “nomad” staffer.

Lastly, all Regional Offices must set up an office team in charge of organizing, monitoring, checking, processing, and validating the collection operations and results. It is this team that administers the supervisors during the supervision period. A target organization flowchart, adjustable to specific Regional Office situations, was developed as part of the MAIOL approach. It was extended and enhanced thanks to an audit by an outside consultant (Cap Gemini) on the operational steering of the office team. One of the consultant’s chief recommendations was a “toolbox.” This resource is vital for Regional Offices given the great complexity and variety of problems raised by the functioning and management of the office team—inside the team itself (steering of collection and data-processing operations), with other Regional Office units, and with third parties (steering the partnership with municipalities). The challenge is to set up a multi-stage team management (involving a team leader and a process leader or area leader), consistently committed to meeting objectives and optimizing results, and equally focused on team members and external interlocutors and partners. As with the other applications, an essential aspect of team management is quality.

The first “moment of truth” will be the first collection wave, which will permit a life-size testing of the robustness of the partnership with municipalities, the functioning of the supervision team, and the responsiveness of the office team. From February–March to fall 2004, processing will be conducted in successive stages, one of the most important being the re-examination of uncoded individual schedules.8 All stages will need to be assessed in depth. That is actually one of the distinctive features of the new census—namely, that organizational arrangements and staff skills will be tested and refined with each successive annual operation. Taking advantage of this time dimension is a critical task for the Regional Offices.

Improving study services and dissemination services for local players

With the “Consistent Regional Offering” target (Offre Cohérente pour les Régions: OCRE), INSEE is promoting a public-service offering that distinguishes between a universal service for all user categories and a specific service catering to participants in the regional public debate. The goals of this initiative and the resources on which it relies are described by Michel Jacod (pp. 27-29). The following discussion is a direct extension of his article.

After an intensive round of collective reflection in 2000, the first tangible steps toward the OCRE goals in our Regional Offices were the establishment of “Regional-Action Service Centers” (Pôles de Service de l’Action Régionale: PSARs) in Q3 2001, followed by the delivery of the first investments made by the Centers from end-2001 onward. Meanwhile, the “Regional-Action Steering Committee” (Comité d’Orientation Pour l’Action Régionale: COPAR) held its first meeting in January 2001. These dates underscore the speed of introduction of the “specific service”—and its efficiency, since most of PSAR investments are now effectively exploited, in full or in part, by a majority of Regional Offices. In most cases, the investments are being used as part of a study partnership with players in the regional public debate, which is
exactly the aim of the exercise. While the initial assessment is very positive, the initiative is still far from complete. Sharp disparities in investment use persist between Regional Offices, either because the investments do not meet the needs voiced in certain regions, or because of a lack of communication (by PSARs or the COPAR) on their potential benefits, or because of problems encountered by research officers (chargés d'études) in appropriating the investments. Moreover, some of the investments, which are not suited to a partnership operation, are mainly used in “self-start” mode. Lastly, imperfections subsist in the pooling process. Only some Regional Offices actually participate in investment testing and commissioning (acceptance/verification), and the specific-service offering is only just beginning to be publicized. All of these issues will be resolved gradually, most notably thanks to (1) more sophisticated procedures for determining PSAR investment areas consistent with local players’ needs, (2) closer relations between PSARs and our “front offices” (Regional Offices and the “INSEE Info Service” Department at the Head Office), and (3) the deployment of portage tools for our offering.

The universal service has experienced a slower start-up, at least as regards the consolidation into a specialized entity—INSEE Contact—of most of our functions for welcoming and guiding the public. At this writing, the relevant transfers from the front offices to INSEE Contact are still at the test stage, and the new organization will not be totally operational until end-2004. Moreover, it will not be fully featured until (1) the implementation of an Internet strategy more ambitious than the present one, particularly as regards detailed local data (“local data” Web project) but also regional sites, and (2) an activation of links with intermediaries in order to meet demand as effectively as possible in certain segments and/or from specific user groups.

Of course, the OCRE initiative is bound to impact the organization and linkage of functions in the Regional Offices’ “Studies and Dissemination Departments” (Services Études-Diffusion: SEDs)—particularly because front offices must now give priority to satisfying the needs of local players, who embody a collective “stakeholding”: local government, central-government agencies, and organizations that depend on these institutions. This priority is indeed shaping the OCRE initiative in our Regional Offices and informs the strong continuity between universal service and specific service. Hence the key features of the changes in mission organization and content: (1) closer coordination between SED units; (2) a better integration of the functional components of the portage program for the INSEE offering; (3) emphasis on improving INSEE regional websites; (4) a publishing policy that showcases the results of the “specific service” (partnership) while leaving room for the basic offering; (5) documentation functions chiefly focused on satisfying demand for “specific service” and so on. While these trends existed beforehand, OCRE has given them powerful momentum and integrated them into an overall approach by the Regional Offices, yet without imposing a standard model. This is another facet of the move toward a “consistent regional offering.”

Three key principles for success...

The combined attainment of all these objectives may seem overambitious given the Institute’s resources. That is why INSEE 2004 must rely on a set of “levers” to ensure the success of the Regional Offices. In simple terms, we can define three key principles:

- **Efficient and effective steering** by project owners—efficient, by matching goals and resources; effective, by meeting goals. Pascal Rivière’s article (pp. 35-38) shows that such steering centers on the “deadline” variable. But deadline-driven steering should not jeopardize the quality of the material supplied to prime contractors. This means that application testing and commissioning phases should not be shortened.

- **Better management** at our Regional Offices. It is often said that INSEE 2004 should enable us to generate collective productivity gains thanks to new applications such as SIRENE 3 and the redesigned CPI; the gains would then be reinvested in regional action and the launch of new projects such as the redesigned census. But this reinvestment is not a mechanical process. At the local level, it calls for (1) a multiplication of initiatives to enhance human resources in their different forms, (2) greater efforts to improve management using appropriate tools; (3) progress in steering by objectives, with a linkage between cost, time, and quality requirements.

- **Greater networking.** Until now, our networking largely relied on our national competency centers. INSEE 2004 has diversified and expanded their impact by setting up “Site Regional Offices” for the price-index and SIRENE applications, by pooling competencies, and by the collective production of study-oriented investments (OCRE). However, the network concept does not consist merely of an organization built around sites or centers. It also calls for a new mindset, characterized by an opening of each Regional Office to “what’s being done elsewhere in the network” so as to draw lessons that will improve and consolidate its internal management. This is a reservoir of productivity whose importance is still largely underestimated.

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9. PSAR investments should improve the quality, responsiveness, and timeliness of partnership-based studies. This should strongly enhance INSEE’s image in French regions: the Institute is often praised for the quality of its services, but criticized on timing issues.

10. We noted earlier that productivity gains should also be reinvested in enhanced quality.
...in the long run

In sum, for a Regional Office, INSEE 2004 is both a group of “structuring projects” to be implemented and a set of challenges in the areas of management methods, organization, and steering. Our Regional Offices have acquired genuine experience for addressing such challenges—in human-resources administration, management projects, and operations networked around competency centers. This experience is undeniably a vital asset for success. But INSEE 2004 quickens the pace, and defines “an ardent obligation.”11 The Regional Office is indeed the locus of the ultimate clash between ambitious projects (ambitious for our staff because of their technical content, and for users because of their scope) and far-reaching management change.

This clash possesses a time dimension whose implications we must fully appreciate, for two reasons. First, the redesigned applications are arriving in our Regional Offices in successive lots, over time. The Offices must adapt their organizational and functional changes and human-resources management to these circumstances. Second, even after the applications are delivered, the projects will unfold over the long term. The typical example is the new population census. The new management practices are developing in conformity with this time horizon, through a process of assessment, reorientation, and capitalization and pooling of experience.

The success of INSEE 2004 in our Regional Offices is also a long-term process in which the “past” (capitalization of experience acquired in change-related tasks) meshes with the “future” (the time dimension of projects). But the Regional Offices cannot remain isolated in the face of accelerating change. Our Head Office has a crucial role to play. We have already mentioned the importance of efficient and effective project steering by project owners, but the Head Office’s role does not stop there. The Head Office cannot stay out of the process of improving Regional Office management. In particular, it must lead the way in sharing and disseminating best practices, driving the implementation of appropriate tools and procedures, and also “leading by example”—all of this without imposing a standardized management model, which would, in any event, be unsuited to local specificities. The Head Office will also need to be attentive to the way in which the Regional Offices bring their internal steering procedures in line with the indicators requested as part of the “Development of Activity Steering and Management Control” initiative (see Denis Rogy’s article, pp. 31-33). Lastly, of course, the Head Office’s action is and will remain decisive in the area of networked operations.

Pierre Muller

Pierre Muller was appointed head of INSEE’s Pays de la Loire Regional Office in July 2003.

He was previously head of the Lorraine Regional Office.

11. A reference to Charles de Gaulle’s famous phrase concerning the need for economic planning [Translator’s note].
INSEE: a half-century of successful adaptation

Since its founding in 1946, INSEE has consistently sought to adapt to the evolution of French society. Our country’s profound transformations have caused deep and sometimes swift changes in the economic and social environment of the French—and, no doubt, in their behaviors. France, a strongly agricultural country at the Liberation, moved within a few years to a largely manufacturing-based economy, then to a heavily service-based economy. In the same period, most of the population emigrated from the countryside to the ever-expanding towns and cities. In a parallel shift, France, once primarily focused on its overseas possessions, gradually blended back into the European environment. More recently, environmental protection and quality of life have become issues of major concern to the French.

A continuous effort to adapt

These upheavals have required a continuous effort by our Institute to adapt. It has often had to reorient, or even revamp, its activities and its administrative and territorial organization. Occasionally, it has taken time to evolve, and found itself lagging social change. On balance, however—and at times with stress and strain in the machinery—INSEE has always been able to keep in step and remain attuned to our fellow citizens’ main concerns. Indeed, a public service intent on pursuing its mission in harmony with the nation must be steadfast in closely tracking social developments. In particular, a dynamic attitude on the part of the statistical institution is vital to the effective functioning of a democratic nation, in which timely and reliable data play a fundamental role in clarifying debates on key political and economic issues. Without good statistical benchmarks, validated and accepted by all, controversies quickly turn into polemics—usually irrational, violent, and unenlightening. The typical result is that major decisions are made on sketchy grounds, sometimes even at random.

The requirements of rigor, independence, and relevance in statistical information are even stronger in our highly media-driven age, all the more so as everyone claims the right to a better understanding of the situation that surrounds us. Our country, like most of its Western partners, is gradually shifting from the rule of law to a more demanding concept, based on the combination of law and understanding. Now INSEE’s activity—in association with that of the official statistical system, whether at the national or regional level—is the main response to this pressing need voiced by our fellow citizens for a better comprehension of the situations they experience.

Our country’s evolution has thus often required INSEE and its staff to undertake major adjustments at all levels—scientific, technical, administrative, and even sociological. The momentum for deep transformation in French society will clearly persist, with ever closer European integration, urbanization, adaptations in the workplace, new family behaviors, and increased leisure time. It is essential for our Institute to be aware of these trends and to prepare effectively to address them, particularly in the context of the INSEE 2004 operation.

National drivers of change

At the Liberation and throughout the 1950s-1960s, the reconstruction of a country totally devastated by the war was followed by the astonishing rise of an industrial production system stimulated by the first development plans. This required the establishment of an accurate, unchallengeable system of demographic observation. At the same time, INSEE cooperated with the ministries concerned to build a system of enterprise statistics that was efficient and—more importantly—innovative for its time. Its three pillars—surveys, registers, and tax sources—gave a greater coherence to the data produced. This allowed more effective guidance for industrial and investment policy decisions at the national and regional levels.

The 1980s and subsequent decades were marked by a greater demand for answers to questions from a population shaken by the economic crisis. The social-statistics apparatus had to be recast and developed into a more efficient, more relevant, and better focused system addressing new, hitherto neglected topics. Not only did labor-force surveys have to cover an ever more complex, fragmented, and multiform workplace, but other aspects of our fellow citizens’ lives were analyzed in depth, such as health, the family and its composition, the consumption of...
services, lifestyles, and, more recently, poverty. Innovative, rapid, and reliable surveys substantially improved our knowledge of these areas and allowed a more precise study of disadvantaged social categories. These key advances were achieved jointly by INSEE and the relevant ministries, in particular those in charge of labor and health. The fact remains that INSEE, largely thanks to its network of survey field workers, played a major role in developing rigorous observation techniques on sensitive subjects concerning the private lives of our fellow citizens.

The European stimulus

The construction of European statistics, which quickened with the advent of the single currency, demanded substantial efforts to modify methods, concepts, and classifications. European statistical harmonization was essential to ensure—via consistent collection systems—the production of comparable data, indispensable to parametering and then assessing common policies.

Our entire activity program and all our collection operations had to pass through the filter of European Union (EU) regulations and be fitted into their mold. The regulations spell out (EU) regulations and be fitted into inevitably cumbersome EU management processes, have doubtless made our management of statistical operations more rigid—while forcing us to be constantly involved in endless negotiations to obtain the slightest change. On the upside, these developments have contributed to the consolidation and enhancement of the official statistician's profession: we are now working on a larger number of vital, fascinating subjects, in close liaison with many European institutes. The statistician is no longer isolated—and does not regret it.

After all these efforts, EU integration has unquestionably strengthened our official statistical system. By engaging in a broader field and fulfilling a greater number of stimulating duties, our system offers greater insight into common economic and social policies. The new situation has also unquestionably promoted the renewal of our statistical system. Interest in statistical activities has been revived in areas where it was waning and threatened by drastic budget cuts.

Enterprises: the necessary reduction of the response burden

It is in our way of preparing and conducting surveys that we have had to make the deepest changes in our behavior and reconsider our experience, work habits, and methods. Society has become more reluctant, more distrustful, not to say nit-picking, with regard to our investigations—even as, paradoxically, it demands ever more detailed and comprehensive information, including on sensitive topics.

Exasperated by the growing burden of administrative requests of all kinds, enterprises are constantly demanding a reduction in the response burden. We have had to engage in contortions to meet these sometimes exaggerated requests by coordinating samples more closely and reducing the size of surveys and questionnaires, while trying not to lose relevant information.

This decisive shift has made the task of preparing operations heavier, but has allowed us to make major progress toward simplification—and hence the satisfaction of demands by firms—for example through a greater reliance on administrative and social statistics. Absent such efforts, the non-response rate on our surveys would have risen sharply, and our data would have lost reliability.

Social statistics: reassuring the population

The unease ran even deeper regarding our investigations into households. The French became more anxious to protect their privacy, fearing the advent of a “Big Brother” entity that would accumulate and store a wealth of individual information. Society entrusted the National Commission on Information Technology and Civil Liberties (Commission Nationale de l'Informatique et des Libertés: CNIL) with the task of protecting it against this threat.

The new institution, at least initially, kept a close watch on computerized processing work at INSEE—the only government agency then possessing powerful resources and collection networks. We restated that our sole occupational interest was to give aggregate results, that the individual
was in no way our objective, and that our ethics were designed to protect privacy. We had to demonstrate that our operating procedures were consistent with these principles. We gradually improved our presentations to CNIL for each of our planned surveys, prepared talking points in support of our questionnaires, and accepted some of the Commission's vetos even when the rejected approaches would have promoted a better knowledge of the population groups studied. Also to better protect privacy, we have had to review our aggregation criteria and disseminate the census results for relatively large areas in population terms, rather than by block as before.

We have adjusted to this continuous social evolution without losing credibility. Among European institutes, INSEE remains one of the least contested and most reliable.

Well-negotiated bends

All of these changes, in the relatively recent past, have forced major adjustments in INSEE’s methods and organization. We mention them here not to sing yet another elegy to bygone days, but to recall two important rules that inform our lives as statisticians. They remain relevant, and we should draw powerful inspiration from them so that we can better prepare our professional future.

First, our Institute’s work focuses on a continuously and rapidly changing human environment, in which it is totally immersed. To preserve our symbiosis with the environment studied, we must adapt to those changes without fail. This is an absolute prerequisite for INSEE to continue to fully play its role as a knowledge-building public service.

The past also shows that these successive, rapid, and far-reaching transformations have never impaired our capacity for technical and scientific innovation, nor undermined our commitment to rigor, nor, a fortiori, modified our stringent ethics. On the contrary, these changes have enabled us to demonstrate our creative dynamism. They have consolidated our action at all levels—continental, national, and regional—making INSEE an official institution highly appreciated in France and respected in the world.

Jean-Pierre Behmoiras
Former head of Statistical Coordination and International Relations at INSEE
INSEE’s territorial organization from 1946 to the present

At its inception in 1946, INSEE inherited 18 Regional Offices (Directions Régionales: DRs), which functioned exclusively as production centers: they faithfully executed instructions from the Head Office, implementing the manual processing procedures of the time. Their activity was thus long described as “manual work.” The coordination of the Regional Offices was light-handed, and there was a stable allocation of recurrent tasks such as vital statistics and the register of local units. The managers of new projects at the Head Office would personally prospect the Regional Offices in search of available resources.

The regional dimension emerged in the late 1960s and early 1970s from a concurrence of several factors: first, the assignment of some management-level INSEE statisticians to Regional Offices, then the administrative decentralization measures of 1972, and lastly the establishment of Regional Economic Observatories (hereafter: REOs) at the behest of the French Regional Development Agency (Délégation à l’Aménagement du Territoire et à l’Action Régionale: DATAR). The REOs were placed under INSEE’s administrative management. The Regional Offices began setting up formal Studies Departments or at least preparing studies whose first clients were the Prefect and the Établissement Public Régional, forerunner of today’s Region. The REOs were inter-departmental, inter-regional, and functionally independent of the INSEE Regional Offices to which they were administratively attached. This arrangement signaled a strong intent to bring the REOs into close contact with local users of economic and social information.

After an audit by McKinsey in 1973, INSEE focused on two goals: (1) to organize its statistical production more efficiently, and (2) to strengthen its presence among regional players. Regional Services (Services Régionaux: SRs) were set up in the four regions of metropolitan France lacking Regional Offices: Corsica, Franche-Comté, Basse-Normandie (Lower Normandy), and Picardy. Later, Studies Departments were opened in each Regional Office and Regional Service. The Studies Departments’ activity was centrally coordinated by a new Head Office unit: the Center for Statistical Studies of Regional Development (Centre d’Études Statistiques du Développement Régional: CESDR).

In the same spirit, INSEE formed two new units at its Head Office. The first was a Dissemination Department (Département de la Diffusion), responsible in particular for steering the activities of the Regional Economic Observatories—now established in every region and totally linked to INSEE in administrative and functional terms. The second was a Production Directorate (Direction de la Production), in charge of coordinating the statistical production activity of regional units. Concurrently, two large National Processing Centers (Centres Nationaux d’Exploitation: CNEs) opened in Nantes and Toulouse.

The debate between decentralizers and centralizers was in full swing. The former emphasized the quality promoted by a local presence; the latter based their case on economies of scale and consistent processing. Some power issues were not totally absent from the thoughts or hidden agendas of participants on either side. But the problems relating to the management of the large National Processing Centers tipped the balance in favor of decentralization. In particular, a catastrophe due to an overload in the SIRENE application (Computerized System for the Register of Enterprises and Local Units) at the Nantes CNE was narrowly avoided thanks to accelerated decentralization.

The 1980s and 1990s therefore witnessed the decentralization of statistical production, on the principle that each Regional Office should process the data pertaining to its territory. The Regional Services became Regional Offices and were put in charge of at least part of the statistical production concerning their respective regions. The CNEs were eventually shut down. Meanwhile, the political decentralization launched in 1982 endowed French regions with democratic legitimacy and

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1. This article discusses arrangements in metropolitan France only (mainland and Corsica). INSEE also has a presence—a strong one—in overseas départements (DOMs); see, in particular, the special section on INSEE and the DOMs in Courrier des statistiques no. 94 (June 2000) (in French). [Translator’s note: the text reflects the situation at the time of writing (2003)].
substantial powers. This led INSEE to build up its regional Studies Departments and REOs, and to coordinate their activities by promoting the concept of “regional action.”

The “territorial rationale” thus became the common denominator for regional action and statistical production: the goal was to enable the first to rely on the second by capturing information at source, without waiting for the end of national processing operations. Admittedly, the technology of the time was consistent with this vision, as it allowed the distribution of processing power through mini-computers and smart terminals. But the doctrine had its limits. Even with twice the staff, the Paris Region (Île-de-France) Regional Office would still find it difficult to handle all the information-gathering in its area. And it would not be the only one. The response consisted of palliatives such as occasional workload transfers (e.g., for censuses) or corrective actions such as long-term delegation of assignments (e.g., for the SIRENE business register or vital statistics). Total decentralization also had its limits for regional action, given that not all the necessary competencies could be assembled in each Regional Office. Hence the intensive search for efficient networking and the emergence of “competency centers.”

The INSEE 2004 project is a timely initiative for putting order and coherence in what could be described as a mixed bag of improvised solutions: transfers, delegation of work, networks, and ad hoc competency centers. The aim is no longer to do the best we can with existing resources, but to effectively build INSEE’s new territorial architecture—taking into account the lessons of the past, the technology of the present, and the social needs of tomorrow. The notion of “proximity” (to an information supplier, a user, a data source, a colleague), which had been so crucial in the debates between decentralizers and centralizers, is no longer tied to the physical neighborhood alone. It has taken on a new meaning in a universe of dematerialized information where remote communication is instantaneous. This gives us the opportunity to design a territorial organization that will simultaneously satisfy different criteria of excellence formerly deemed incompatible.

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2. In 1993, INSEE introduced a standard organization chart for its Regional Offices, notably featuring the establishment of a “Studies and Dissemination Department” (Service Études-Diffusion: SED), which took over the combined activities of the former Studies Department and Regional Economic Observatory.
Road safety: a better understanding for more effective action

“If everyone does a little bit, Life will be the winner”

After a weekend of heavy traffic in France, all the national media—the press, radio, and television—engage in a sadly routine accounting exercise: the painful enumeration of deaths and serious injuries, of shattered lives and families. Many graphic articles and reports are devoted to the worst accidents, which trigger emotional nationwide responses.

Beyond this significant media coverage of its deadliest consequences, road unsafety also has a more “everyday” dimension. In 2003, France recorded 90,220 injury traffic accidents. In addition to 96,722 slight injuries, they caused 5,731 fatalities and 19,207 serious injuries—a daily average of 16 fatalities and 53 serious injuries. While inherently unacceptable, this total is one of the lowest ever registered since 1956, the initial year of this sinister statistical series; in the same period, traffic has grown more than sixfold in France. In particular, substantial progress has been achieved in the past twenty years: from 12,543 fatalities and 95,099 serious injuries in 1980 to 10,289 fatalities and 52,578 serious injuries in 1990.

The battle against road unsafety was effectively launched in the early 1970s by two joint decisions: (1) the formation of an Inter-Departmental Committee on Road Safety (Comité Interministériel de la Sécurité Routière: CISR), responsible for defining and enforcing government policy in the area; (2) the appointment of an Inter-Departmental Delegate for Road Safety (Délégué Interministériel à la Sécurité Routière: DISR), in charge of preparing committee proceedings and monitoring their implementation (Decree 72-608 of July 5, 1972, later replaced by Decree 75-360 of May 15, 1975).

For twenty years now, the Inter-Departmental Delegate for Road Safety also heads a central-government agency: the Directorate for Road Safety and Traffic (Direction de la Sécurité et de la Circulation Routières: DSCR), set up at the Transportation Ministry in 1982. Focusing its action on the three components of road safety, DSCR is well-known to the public thanks to its year-round communication and awareness campaigns as well as the “Crafty Bison” (Bison Futé) road-user information service.

At the same time as the DSCR, another entity was set up to flank the Inter-Departmental Delegate for Road Safety: a National Inter-Departmental Observatory on Road Safety (Observatoire National Interministériel de Sécurité Routière: ONISR), responsible for collecting and disseminating the information needed to plan and implement road-safety policy. The Observatory and its work are the described in the four articles that follow.

Jean Chapelon and Fabrice Loones

Jean Chapelon is Secretary General of the National Inter-Departmental Observatory on Road Safety (ONISR). Fabrice Loones was an ONISR research officer at the time of writing; he is now with the INSEE Regional Office in Burgundy.

1. Important note: the articles in this section were originally published in the September 2002 issue (no. 103) of Courrier des statistiques in French. The Editor thanks Thomas Renaud (Transportation Ministry) for his help in updating the texts and providing the latest data available.
November 1974: general speed limits: 90 km/h roads, 110 km/h expressways, 130 km/h highways

December 1973: speed limits of 90 km/h on roads and 120 km/h on highways

July 1978: Law on prevention of drunken driving

October 1990: Alcohol tests by law-enforcement officers
December 1990: 50 km/h in urban areas; back seatbelts compulsory

January 1992: Compulsory inspection of vehicles over specified age

July 14, 2002: Statement by French President

June 1999: Repeat speeding becomes criminal offense; vehicle-owner liability

September 1995: 0.8 g/l alcohol

July 1994: 0.7 g/l alcohol

October 1990: 0.5 g/l alcohol

July 1987: Tougher penalties for drunken driving

August 1983: Speed limiters on trucks

December 1983: 0.8 g/l alcohol

July 1992: Introduction of "points system" for driver’s license

July 1983: Speed limiters on trucks

December 1983: 0.8 g/l alcohol

October 1979: Front seatbelts compulsory in urban areas

October 1979: Front seatbelts compulsory outside urban areas; helmet compulsory

June 1973: Speed limit of 110 km/h on high-traffic roads, 100 km/h on other roads; front seatbelts compulsory outside urban areas; helmet compulsory

June 1973: Speed limit of 110 km/h on high-traffic roads, 100 km/h on other roads; front seatbelts compulsory outside urban areas; helmet compulsory

November 1974: Front seatbelts compulsory outside urban areas; helmet compulsory

December 1973: Speed limits of 90 km/h on roads and 120 km/h on highways
France's National Inter-Departmental Observatory on Road Safety (Observatoire National Interministériel de Sécurité Routière: ONISR) reports to the Inter-Departmental Delegate for Road Safety (Délégué Interministériel à la Sécurité Routière: DISR), who also heads the Directorate for Road Safety and Traffic (Direction de la Sécurité et de la Circulation Routières: DSCR) at the Transportation Ministry.

ONISR collects and disseminates the information needed to plan and implement road-safety policy. In this capacity, it is in charge of: rationalizing and standardizing the collection of statistical data from different national and international sources; editing, interpreting, and disseminating them; undertaking and monitoring general and specialized studies on road safety; and assessing current and planned road-safety measures.

To accomplish its missions, its small team of fewer than ten staffers relies on study and research organizations such as the National Institute of Research on Transportation Systems and their Safety (Institut National de Recherche sur les Transports et leur Sécurité: INRETS), the National Civil-Engineering Research Laboratory (Laboratoire Central des Ponts et Chaussées: LCPC), the Office of Technical Studies on Roads and Highways (Service d’Études Techniques des Routes et Autoroutes: SETRA), and the Center for Studies on Networks, Transportation, Urban Planning, and Public Construction (Centre d’Études sur les Réseaux, les Transports, l’Urbanisme et les Constructions Publiques: CERTU). It also taps into a network of regional observatories located in the Transportation Ministry’s regional offices (Directions Régionales de l’Équipement: DREs).

ONISR's work program and methodological options are submitted for evaluation to the Expert Committee of the National Council on Road Safety (Conseil National de la Sécurité Routière: CNSR).1

A vital source: the “accidents” database

ONISR's statistical production largely relies on the National Database of Injury Traffic Accidents (Fichier National des Accidents Corporels de la Circulation Routière), which in turn is fed by the very comprehensive reports on injury traffic accidents (Bulletins d’Analyse d’Accident Corporel: BAACs) compiled by the Police and Gendarmerie.

The data gathered from these sources allow very detailed analysis, but their release is relatively slow: about two and a half months after the end of the month under review. To shorten the delay, French authorities gradually introduced a parallel “fast-track reporting” procedure for obtaining provisional data in 2000. This makes it possible to determine in the first few days of month m+1 the number of injury traffic accidents in the previous month and the number of ensuing fatalities and injuries.

The nationwide implementation of this accelerated system, coupled with the development of effective seasonal-adjustment tools, led to substantial progress in monitoring the current road-safety situation.

Gaining fuller knowledge

One of the Observatory’s abiding concerns is the qualitative and quantitative improvement of its statistical output. ONISR has launched two major initiatives for this purpose. The first is the simplification and reorganization of the information system used to compile the National Database of Injury Traffic Accidents. The second is the development, at the département level, of a local accident indicator taking into account traffic volume and the distribution of traffic among different categories of networks: highways, open countryside, urban areas.

Two new databases focused on risk behaviors are also being planned. The first is part of a “speed” project aimed at fitting Automated Traffic Recording Stations (Stations Automatisées d’Enregistrement du Trafic: SIREDOs) with special modules for the systematic recording and computer processing of driving speeds. The second

1. Established by Decree 2001-784 of August 28, 2001, CNSR participates in the planning and assessment of public policies on road safety. It commissions studies and research that it deems useful to improving knowledge on road safety, as well as evaluations of actions undertaken. Before CNSR’s actual start-up in October 2001, ONISR’s activity was supervised by two ad hoc bodies: an executive committee and a steering and assessment committee.
database, compiled from the driver’s-license register, will provide much information on the behaviors leading to license cancellations and withdrawal of points. In the nearer term, the Observatory is currently taking part in the preparation of a survey on drivers’ mobility, risk, attitudes, and behaviors (the “MARC” survey). Developed under an agreement between the French government and insurance companies, the survey will be conducted under INRETS supervision.

Sharing knowledge

ONISR’s flagship publication, printed in 15,000 copies, is a statistical yearbook entitled *La sécurité routière en France* (Road Safety in France), whose approximately 200 pages offer an overview of the current situation and trends, as well as comparisons with other countries.

In addition to this annual reference work, always eagerly awaited, ONISR issues regular updates of a supplementary statistical compilation, *Les grands thèmes de la sécurité routière* (Main Topics in Road Safety), printed in 5,000 copies, and two information brochures for the general public, *La sécurité routière à travers les chiffres* (Road Safety in Figures) and *Les grandes données de l'accidentologie* (Main Data on Accidents). The latter has a print run of 300,000 copies.


All these titles, apart from *Les grandes données de l'accidentologie*, are published by La Documentation Française.

The ONISR’s recently redesigned website (www.securiteroutiere.equipement.gouv.fr/observatoire) now provides very full coverage, arranged by level of complexity: “basic” and “for further information.”

Naturally, the website posts many statistical results with comments. In particular, visitors can read the latest edition of the statistical yearbook in interactive mode in the “for further information” section, “general accidentology” heading, “2003 figures” sub-heading.

Jean Chapelon and Fabrice Loones

Jean Chapelon is Secretary General of the National Inter-Departmental Observatory on Road Safety (ONISR).

Fabrice Loones was an ONISR research officer at the time of writing; he is now with the INSEE Regional Office in Burgundy.
The National Database of Injury Traffic Accidents

The National Database of Injury Traffic Accidents (Fichier National des Accidents Corporels de la Circulation Routière) plays a central role in the management and assessment of French road-safety policy. It also supplies quantitative inputs to communication campaigns by the Transportation Ministry on such topics as alcohol consumption and seatbelt effectiveness.

Co-administered by SETRA and ONISR and managed with the SAXO software application, the database is fed by the reports on injury traffic accidents (BAACs) prepared by the Police and Gendarmerie.

Injury traffic accidents

There is no standardized international definition of an injury traffic accident (or injury road accident). In France, the term accident corporel de la circulation routière is applied to any accident occurring on a public roadway and involving at least one vehicle if it has caused at least one victim, i.e., a person killed outright or whose condition will require hospitalization or at least basic medical care.

The final count is established within six days. In addition to persons killed outright, the French statistics also include as fatalities the victims who die within six days of the accident. The other victims will be counted as seriously injured or slightly injured, the first category denoting persons still in hospital six days after the accident.

In 2003, France recorded 90,220 injury accidents meeting the criteria defined above, of which 5,168 were fatal accidents. They killed 5,731 people and injured 115,929, of whom 19,207 seriously.

France and Portugal (which counts deaths within 24 hours) remain the only countries of the European Union and even in OECD (Organization for Economic Cooperation and Development) not to base their national statistics on the definition of road deaths as stated in the 1968 Vienna Convention, namely, any person who was killed outright or who died within thirty days as a result of an accident.

The number of killed at 30 days communicated by France for purposes of international comparisons is obtained by multiplying by 1.057 the number of killed at 6 days (Portugal applies a multiplier coefficient of 1.14).1

<table>
<thead>
<tr>
<th>Country</th>
<th>Deaths at 30 days</th>
<th>Deaths at 30 days per million inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>956</td>
<td>119</td>
</tr>
<tr>
<td>Belgium</td>
<td>1,486</td>
<td>143</td>
</tr>
<tr>
<td>Denmark</td>
<td>463</td>
<td>86</td>
</tr>
<tr>
<td>Finland</td>
<td>415</td>
<td>80</td>
</tr>
<tr>
<td>France</td>
<td>7,655</td>
<td>129</td>
</tr>
<tr>
<td>Germany</td>
<td>6,842</td>
<td>83</td>
</tr>
<tr>
<td>Ireland</td>
<td>378</td>
<td>96</td>
</tr>
<tr>
<td>Italy</td>
<td>6,736</td>
<td>116</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>62</td>
<td>140</td>
</tr>
<tr>
<td>Netherlands</td>
<td>987</td>
<td>61</td>
</tr>
<tr>
<td>Portugal</td>
<td>1,675</td>
<td>161</td>
</tr>
<tr>
<td>Spain</td>
<td>5,347</td>
<td>132</td>
</tr>
<tr>
<td>Sweden</td>
<td>532</td>
<td>60</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3,581</td>
<td>60</td>
</tr>
</tbody>
</table>

*2001 for Belgium.
No recent data available for Greece.
France: 7,242 deaths at 6 days → 7,242*1.057 = 7,655 deaths at 30 days.

The BAAC

Every injury traffic accident should normally be described in a BAAC report form, filled out by the appropriate Police or Gendarmerie unit (depending on where the accident occurred; see next paragraph). The form is the true keystone of the road-safety information system. It provides very comprehensive information, arranged under four broad, interlinked headings: general information (date and time, locality, atmospheric conditions, type of accident, etc.), detailed description of location, characteristics of each vehicle involved (with indication of maneuver performed before the accident), socio-demographic characteristics, status, and condition of each road-user involved (with indication of maneuver performed before the accident), socio-demographic characteristics, status, and condition of each road-user involved (drivers, passengers or pedestrians; killed, injured, or unhurt), with a mention of any violations (drunken driving, lack of safety equipment, etc.). The BAAC carries the code of the issuing unit and the identification number of the police report (procès-verbal) if one was compiled.

### Glossary of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASFA</td>
<td>Association des Sociétés Françaises d’Autoroutes (Association of French Toll-Highway Concessionaires)</td>
</tr>
<tr>
<td>BAAC</td>
<td>Bulletin d’Analyse d’Accident Corporel de la Circulation (Analytical Report on Injury Traffic Accident)</td>
</tr>
<tr>
<td>CDES</td>
<td>Cellules Départementales d’Exploitation et de Sécurité (Operations and Safety Units at département level) CDESs are located in DDEs (see below).</td>
</tr>
<tr>
<td>CERTU</td>
<td>Centre d’Études sur les Réseaux, les Transports, l’Urbanisme et les Constructions Publiques (Center for Studies on Networks, Transportation, Urban Planning, and Public Construction) Administratively linked to the Ministry for Infrastructure, Transport, Spatial Planning, Tourism, and the Sea. Coordinates the work of CETEs (see below) in its area of activity.</td>
</tr>
<tr>
<td>CETE</td>
<td>Centre d’Études Techniques de l’Équipement (Center for Technical Studies on Infrastructure) Decentralized technical units operating at the supra-regional level.</td>
</tr>
<tr>
<td>CISR</td>
<td>Comité Interministériel de la Sécurité Routière (Inter-Departmental Committee on Road Safety)</td>
</tr>
<tr>
<td>CNSR</td>
<td>Conseil National de la Sécurité Routière (National Council on Road Safety)</td>
</tr>
<tr>
<td>CRS</td>
<td>Compagnies Régionales de Sécurité (Law-enforcement units whose duties include road police.</td>
</tr>
<tr>
<td>DDE</td>
<td>Directions Départementales de l’Équipement (Département Directorates of Ministry for Infrastructure, Transport, Spatial Planning, Tourism, and the Sea)</td>
</tr>
<tr>
<td>DGGN</td>
<td>Direction Générale de la Gendarmerie Nationale (Defense Ministry)</td>
</tr>
<tr>
<td>DGPN</td>
<td>Direction Générale de la Police Nationale (Ministry of the Interior, Domestic Security, and Local Liberties)</td>
</tr>
<tr>
<td>DISR</td>
<td>Délégué Interministériel à la Sécurité Routière (Inter-Departmental Delegate for Road Safety)</td>
</tr>
<tr>
<td>DRE</td>
<td>Directions Régionales de l’Équipement (Regional Directorates of Ministry for Infrastructure, Transport, Spatial Planning, Tourism, and the Sea)</td>
</tr>
<tr>
<td>DSCR</td>
<td>Direction de la Sécurité et de la Circulation Routières (Ministry for Infrastructure, Transport, Spatial Planning, Tourism, and the Sea)</td>
</tr>
<tr>
<td>INRETS</td>
<td>Institut National de Recherche sur les Transports et leur Sécurité (National Institute of Research on Transportation Systems and their Safety) Public agency under dual authority of Research Ministry and Transportation Ministry.</td>
</tr>
<tr>
<td>LAB</td>
<td>Laboratoire d’Accidentologie, de Biomécanique et d’Études du Comportement Humain (Laboratory for Accident Research, Biomechanics, and Study of Human Behavior) Joint venture by Technical Divisions of Peugeot-Citroën and Renault.</td>
</tr>
<tr>
<td>ONISR</td>
<td>Observatoire National Interministériel de Sécurité Routière (National Inter-Departmental Observatory on Road Safety)</td>
</tr>
<tr>
<td>PAF</td>
<td>Police Aux Frontières (Border Police)</td>
</tr>
<tr>
<td>PV</td>
<td>Procès-Verbal (Police Report)</td>
</tr>
<tr>
<td>SAXO</td>
<td>Serveur Accident sous uniX et Oracle (Accident Server under UNIX and Oracle)</td>
</tr>
</tbody>
</table>
The BAAC network comprises some 3,500 collection points, or about 3,000 “local brigades” of the Gendarmerie, 465 “public security zones” (circonscriptions de sécurité publique), each with a unit specializing in road safety, and 13 CRS units. There is also the Border Police (PAF), which handles accidents at the borders and in airport areas. In Paris, each of the 20 main district police stations (commissariats d’arrondissement) is responsible for its sector and reports to the Central Office for Accidents (Bureau Central des Accidents) of the Préfecture de Police.

BAAC forms from around the country are sent back up to central departments through different channels, depending on whether they were prepared by the Gendarmerie (which is under Defense Ministry command) or the Police (Ministry of the Interior, Domestic Security, and Local Liberties).

BAACs filled out by local Gendarmerie brigades are forwarded to the départment platoons (directly or via Gendarmerie companies), which, after validating and consolidating them, send them on to the National Information-Processing Center in Rosny-sous-Bois. All these transmissions are performed using software and IT procedures specific to the Gendarmerie.

The BAACs compiled by CRS units and the Central Office for Accidents at the Paris Préfecture de Police are sent directly to the Computer Processing Center at the Interior Ministry, Place Beauvau, in Paris. BAACs from other police stations or Border Police units are first sent to the Computer Processing Center in Juvisy, which, after initial checks, links the forms together and forwards them to the Beauvau Center. CRS units are equipped with customized data-capture software. For data capture and transmission, most police stations use the PACTOL program, developed by the CETE (see glossary p. 56) in Rouen. Others still use an older program, AURORE. Juvisy must, however, capture the very small number of BAACs received from the Border Police as well as from the few police stations not yet equipped with dedicated software.

Of the total 90,220 injury accidents reported in 2003, 59,239 were recorded by the Police and 30,981 by the Gendarmerie.

Compiling the national database

The BAACs centralized at the Rosny-sous-Bois and Beauvau facilities are sent to SETRA in the form of monthly files, including any items left from previous months. The Rosny-sous-Bois file is available an average 20 days after the observation month, while the Beauvau file is available a month and a half after.

When they are received by SETRA, the files undergo a full array of checks in addition to those already included in the capture software used by law-enforcement authorities. This quality control at the national level, incorporated into the SAXO application, covers four areas: (1) identification of duplicate reports, (2) checking file integrity at the reading level (order and structure of the BAACs contained in the file), (3) spotting invalid entries (when the value entered for a given variable lies outside the range of values specified for the variable), and (4) checks on intrinsic consistency of BAACs (for example, a report will be flagged as anomalous if a car driver is described as wearing a helmet). These intrinsic-consistency error corrections require close scrutiny of the records in question. In some cases, the entities that prepared the reports may be asked to provide clarifications.

Other, more informal checks are designed to spot gaps in report transmission from individual Police or Gendarmerie units, so as to recover the missing reports and/or restore the faulty communication channels. Such interruptions are often due to transient computer dysfunctions that blocked report capture or transmission. They may also be caused by temporary local staff shortages that prevented the actual preparation of the BAACs.

Given these editing operations, the dissemination file containing all the BAACs (from Police and Gendarmerie) of month \( m \) is not available until the middle of month \( m+3 \), and that of the full year toward the end of March of the following year.

However, to allow the dissemination of crucial information in a shorter time frame, an additional “fast-track reporting”

---

2. Gendarmes report accidents occurring in the open countryside and in towns of fewer than 7,000 inhabitants, police officers are responsible in towns of at least 7,000 inhabitants, and the CRS are in charge of urban highways.
A widely used database

Besides being used by SETRA and ONISR for their internal needs, the National Database of Injury Traffic Accidents is very widely used by the Transportation Ministry’s other offices, in particular CERTU, and, at the local level, the CETEs, the Regional Road-Safety Observatories (located in the DREs), and the CDESs (located in the DDEs). (See glossary p. 56).

The Ministry itself prepares many analyses at the national level using special procedures to process the database. The latter also serves as a sampling frame for risk studies that focus on distinct types of accidents and require access to the detailed information on accident conditions recorded in the forms. At the local level, the decentralized offices compile annual figures to supplement ONISR’s national annual assessments. They also prepare risk studies on road sections with high accident-generating characteristics. This research relies on extractions of data on the département from the national database by SETRA for the DDEs. The files undergo further adjustments at the local level, mostly concerning location identification and road infrastructure, but also, in some cases, the addition of accidents unrecorded in the national database.

Outside the Transportation Ministry, the national database is a valuable resource and reference tool for INRETs, ASFA, LAB, and, more generally, all accident-research institutes.

On the agenda: simplification and deconcentration

A major redesign of our information system on injury traffic accidents is under way, aimed at producing timelier and more reliable statistics.

A preliminary step was the establishment in mid-2000 of a production-monitoring group pooling all the entities involved in feeding and managing the database—most notably DGGN and DGPN, which are in charge of gathering the BAACs. The group began by working on the construction and dissemination of a monthly “dashboard” of BAAC quality indicators (completeness, error rates, transmission times, etc.), and the launch of communication and “remotivation” campaigns aimed at

Police and Gendarmerie units in charge of preparing the report forms. The group then turned to the preparation of a new reference guide for filling out BAACs and, after, to the expert assessment and improvement of transmission channels.

In parallel with this consolidation work, we began an extensive consultation of database users aimed at achieving a judicious streamlining of the BAAC. The basic task was to assess the usefulness of each heading in the report form, measured against the presumable degree of difficulty in collecting the relevant data and the degree of reliability of the information actually gathered. This case-by-case review showed that the BAAC could be cut by about 20% in two ways: (1) by removing some headings that in practice are hardly ever filled out, if at all; (2) by changing the range of values specified for some variables. Another aspect of this “simplification” project was the development of a second, substantially abridged BAAC form, designed to report accidents that did not generate an official police report (procès-verbal) or that caused only slight injuries. Lastly, we began to plan the construction of a “type of accident” variable for which the range of response options would overlap with information items currently dispersed under different headings (e.g., maneuvers by road-users involved, collision, etc.).

The redesign project includes a complete overhaul of transmission channels and the creation of a database shared by all participants. This would allow the introduction of data other than those collected in the BAAC itself. The incorporation of items reported with the “fast-track” procedure (accidents, fatalities, injuries) will provide timely, reliable data on accidents to local players in the road-safety system. The new arrangement will allow a direct integration of data on roadways and road infrastructure collected from dedicated databases.

**Completeness of national database**

A recent study on the Rhône département showed that the accident database for the area does not fully cover injury accidents not involving third parties (and not having caused fatalities). This is particularly true when the only vehicle involved is a two-wheel motor vehicle (and even more so in the case of a bicycle). The omission is more likely in the absence of major injuries. The study also showed that a number of slightly injured victims were wrongly classified as seriously injured in the accident report forms (BAACs).

1. The study consisted in creating a register of victims of injury traffic accidents from a survey of various entities involved in providing post-accident medical care. The resulting register was compared with the national database.

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3. These new criteria took effect on January 1, 2004.
4. The official guidelines for preparing PVs are extremely variable from one prosecutor’s office (parquet) to another.
managed by the DDEs. This will further reduce the workload for Police and Gendarmerie units, but also substantially improve data quality. In the new IT architecture, the transmission procedure should remain centralized, relying on the integration of sub-databases maintained by the DGGN and DGPN. Among other benefits, this reorganization of transmission channels will give DDE timely access to information ready for direct local use. In the current system, the département databases, generated from the national database, are not actually usable until four to six months after the accident.

The project comprises two phases:

**Phase 1** of the new architecture calls for the creation of a new infocenter, which will allow fast, easy “read-only” access for all participants, most notably through the compilation of simple dashboards.

**Read-only access to the database (phase 1) is scheduled for March 2005.**

Phase 2 will extend the new architecture to all départements, which will be able to correct the central database directly. A local administrator will be appointed to coordinate these checking/validation tasks.

**Phase 2 is scheduled to begin in 2006.**

Jean Chapelon
and Fabrice Loones

Jean Chapelon is Secretary General of the National Inter-Departmental Observatory on Road Safety (ONISR). Fabrice Loones was an ONISR research officer at the time of writing; he is now with the INSEE Regional Office in Burgundy.
Sample poster from a road-safety advertising campaign in 1999:

“ENOUGH.

Each day in France, 23 people die and 96 are seriously injured in towns and on the roads. How many children won’t grow up? How many teenagers won’t experience first love? How many families will lose a father or mother? How long are we going to take this?

It’s time for a real reduction in the number of road deaths. It’s time for each of us to see this as our problem—one that we can solve.

Each of us knows what to do to make sure that each day we won’t have those 23 deaths, those 23 broken families, those 96 seriously injured, many of whom are handicapped by losing half a life.

To respect driving rules is to respect others, to be respected oneself, to respect oneself.

Each year, in France, we have a casualty list of wartime proportions. Enough!

If each of us does a little bit, life will be the winner.”
For its analysis of monthly figures, the Inter-Departmental Observatory on Road Safety (Observatoire National Interministériel de Sécurité Routière: ONISR) has long relied exclusively on the National Database of Injury Traffic Accidents (Fichier National des Accidents Corporels de la Circulation Routière), with the results simply presented as raw figures.

This arrangement was unsatisfactory, as regards both the speed of publication and the richness of the information offered. First, it was hampered by the length of the database update: about two and half months after the observation month. Second, it precluded the compilation of seasonally adjusted series.

Both problems were recently solved thanks to the implementation of a new collection system combined with the construction of a suitable seasonal-adjustment tool.

**Fast-track reporting**

In parallel with the development of standardized injury-accident report forms (Bulletins d’Analyse d’Accident Corporel: BAACs; see our preceding article), France also gradually introduced an additional, “fast-track reporting” system in 2000, consisting solely of a tabulation of accidents and victims.

Initially limited to weekends with high traffic volume, the new system was extended to all accidents recorded by the Gendarmerie and later to all accidents recorded by the Police. Since then, it has enabled officials to determine in the first few days of month $m+1$ the number of injury accidents in month $m$ and the resulting number of outright fatalities and of injuries (irrespective of severity).

The data collected provide inputs for ONISR’s “monthly short-term indicator,” which compares the previous month (for example, December 2004) with the same year-earlier period (December 2003).

The month-$m$ barometer is published at the start of month $m+1$. Naturally, the month-$m$ balance computed from the “fast-track” data-collection system can be refined later by checking it against the accidents database, which counts as fatalities not only persons killed outright but also persons injured who have died within six days of the accident.

### Annual equivalents and seasonally adjusted series

The 440 fatalities recorded in December 2004 translate into an annual equivalent of 5,180 fatalities ($440 \times 365/31 = 5,180$). If we were to set an annual “objective” of 5,000 fatalities, for example, it would be extremely arbitrary to conclude that December was a rather “bad” month for compliance with safety rules.

Accident risk is proportional to traffic volume. Seasons and our ingrained habits being what they are, the road-traffic pattern is far from uniform all year long. Each month displays specific characteristics that can be observed consistently, year after year. These recurrent effects are compounded by each year’s specific calendar effects: not all months necessarily have the same number of weekends, a single weekend may straddle two months, holidays may be “well” or “badly” timed, Easter Monday may fall in March or April, and so on. A final key factor is the weather.

Hence the need for seasonal data. For this purpose, we have developed an appropriate seasonal-adjustment tool,
Jean Chapelon and Fabrice Loones

Fatalities, 2003-2004
(adjusted annual-equivalent series)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>5,075</td>
<td>6.8%</td>
<td>5,493</td>
<td>-2.6%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Feb</td>
<td>4,661</td>
<td>-1.5%</td>
<td>5,382</td>
<td>-1.0%</td>
<td>-8.8%</td>
</tr>
<tr>
<td>Mar</td>
<td>4,727</td>
<td>-3.4%</td>
<td>5,898</td>
<td>0.3%</td>
<td>-22.3%</td>
</tr>
<tr>
<td>Apr</td>
<td>4,944</td>
<td>0.6%</td>
<td>5,259</td>
<td>2.8%</td>
<td>-10.7%</td>
</tr>
<tr>
<td>May</td>
<td>5,508</td>
<td>2.6%</td>
<td>6,267</td>
<td>-1.2%</td>
<td>-9.8%</td>
</tr>
<tr>
<td>June</td>
<td>4,847</td>
<td>2.4%</td>
<td>5,905</td>
<td>7.2%</td>
<td>-20.0%</td>
</tr>
<tr>
<td>July</td>
<td>5,518</td>
<td>1.1%</td>
<td>5,779</td>
<td>4.9%</td>
<td>-7.2%</td>
</tr>
<tr>
<td>Aug</td>
<td>5,523</td>
<td>2.4%</td>
<td>5,978</td>
<td>3.4%</td>
<td>-10.2%</td>
</tr>
<tr>
<td>Sept</td>
<td>5,548</td>
<td>-0.5%</td>
<td>5,816</td>
<td>-0.4%</td>
<td>-6.0%</td>
</tr>
<tr>
<td>Oct</td>
<td>5,389</td>
<td>0.0%</td>
<td>5,598</td>
<td>0.7%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Nov</td>
<td>4,956</td>
<td>-0.8%</td>
<td>5,123</td>
<td>-0.9%</td>
<td>-5.7%</td>
</tr>
<tr>
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</table>

This new tool enables ONISR to publish seasonally adjusted annual-equivalent series—such as those shown in the table opposite—at the start of each month, at the same time as the monthly barometer.

Jean Chapelon and Fabrice Loones

Jean Chapelon is Secretary General of the National Inter-Departmental Observatory on Road Safety (ONISR).
Fabrice Loones was an ONISR research officer at the time of writing; he is now with the INSEE Regional Office in Burgundy.

1. This model was developed by the Office of Technical Studies on Roads and Highways (Service d’Études Techniques des Routes et Autoroutes: SETRA) with the aid of the National Institute of Research on Transportation Systems and their Safety (Institut National de Recherche sur les Transports et leur Sécurité: INRETS) and the Economy and Statistics Office (Service Économique et Statistique: SES) of the Ministry for Infrastructure, Transport, Spatial Planning, Tourism, and the Sea.
A new indicator for local accident statistics

The monitoring of local road-safety programs in France long relied on one of two indicators: (1) annual changes in the number of fatalities or accidents in each département, or (2) inter-département comparisons of the ratio of fatalities to the number of inhabitants.

However, the first indicator is intrinsically erratic, especially when applied to the number of fatalities. For instance, the six départements in which the number of fatalities fell most sharply between 1998 and 1999 had all recorded a sharp rise between 1997 and 1998.

The ratio of fatalities to the local population is also erratic, at least from year to year. More important, the number of inhabitants in a département provides no genuine gauge of the “theoretical” risk exposure there. The truly relevant explanations are to be sought in the mileage traveled by type of network: to cite just a single example, there are about five times fewer deaths per kilometer on highways than on country roads. While there is some correlation between the population of a département and the total mileage recorded in the département, there can be wide disparities in the road infrastructure of two equally populated départements.

That is why, to make an informed assessment of whether a département’s results are “good” or not, we had to build an indicator that would take into account not only traffic volume but its breakdown by road category.

The new IAL

The new “local accident indicator” (Indicateur d'Accidentologie Locale: IAL) is computed as the ratio of the number of deaths observed in the département under study to the number of deaths that would have been recorded if the risk exposures, by road category, had been identical to those measured in France nationwide.

Five road categories are defined: (1) urban units of 5,000+ inhabitants; outside these urban units, (2) highways (autoroutes), (3) main roads (routes nationales), (4) local roads (routes départementales), (5) “other roadways.”

The risk exposure in category (1) is defined as the ratio of persons killed in an accident occurring in an urban unit of 5,000+ inhabitants to the total population of these units, expressed in tens of thousands of inhabitants (on the basis of the latest population census). For categories (2), (3), and (4), we calculate the ratio of the number of fatalities to the total mileage traveled in each of these networks, expressed in hundreds of millions of kilometers.

These risk levels are computed identically for all geographic areas: département, region, and all of France. The number of fatalities used is the total of the past five years, recalculated annually on a sliding basis. The choice of a structural indicator was guided by the desired objective: what we want to measure is not so much a short-term pattern as the stabler notion of relative risk. For the sake of consistency, the mileage estimates are based on data (network length and mean daily flow) for the same five-year period. The estimated values are therefore annual averages.

To understand this properly, let us take the (fictitious) example of a département in which 500 people have been

1. However, urban highways and the Paris ring road (Boulevard Périphérique) have been classified under highways [2].
2. More specifically, the total population multiplied by a (1 + k) factor, where k is the percentage of “non-local” fatalities, i.e., drivers or passengers of vehicles registered outside the area under study.
3. Depending on the observation level—département, region, all of France—the system will count as “non-local” fatalities the drivers or passengers of vehicles registered outside the département, outside the region, or outside France.
Jean Chapelon

killed in the past five years, of whom 90 in an urban unit of 5,000+ inhabitants, 25 on highways, 110 on main roads, 250 on local roads, and 25 on “other roadways.”

The nationwide risk levels for these five roadway categories are respectively 1.76, 0.53, 1.99, 2.04, and 2.26. For the département observed, they stand at 3.39, 0.48, 2.66, 2.51, and 2.45.

If the risk exposure in the département under study had been identical to the total French levels for each roadway category, the number of fatalities recorded in the département would have been:

$$90 \times (1.76/3.39) + 25 \times (0.53/0.48) + 110 \times (1.99/2.66) + 250 \times (2.04/2.51) + 25 \times (2.26/2.45)$$

or $47 + 28 + 82 + 203 + 23 = 383$.

The “overall” local accident indicator for our control département is equal to $500/383$, or 1.31. For highways alone, it is equal to $25/28 = .89$.

Let us stay with the highway example. If we divide the number of fatalities on the département’s highway network (25) by the risk exposure on the network (0.48), we naturally obtain the mileage traveled on the network (annual average for the last five years), expressed in hundreds of millions of kilometers: $25/0.48 = 52$. Applying to this result the risk exposure on the total French highway network (0.53), we will, just as naturally, obtain the figure of 28 fatalities ($52 \times 0.53 = 28$).

Of course, the reader will have noted that the choices concerning the quantification of the data used to determine the local accident index (IAL) will not affect the outcome. The result would obviously have been the same if we had chosen to express the number of fatalities as an annual average rather than a five-year total, or the population of urban units of 5,000+ inhabitants in thousands rather than tens of thousands, or the mileages as five-year totals and not as annual averages, and in billions of kilometers instead of hundreds of millions. But the reader will also have noted that the final choices determine risk levels close to unity in absolute value (from 0.48 to 3.39 in the example above), thereby ensuring good legibility.

The data

The numbers of fatalities by département and road category are derived from the National Database of Injury Traffic Accidents (Fichier National des Accidents Corporels de la Circulation Routière). The figures are carefully checked and, where appropriate, imputed by the Regional Observatories on Road Safety operating in the Département Directorates of the Ministry of Infrastructure (Directions Départementales de l’Équipement: DDEs).

The Office of Technical Studies on Roads and Highways (Service d’Études Techniques des Routes et Autoroutes: SETRA) supplies mileage data for highways and main roads, estimated from the network length and the average daily flows registered by traffic recording stations. These data are also checked in the DDEs.

Estimating mileage on département roads was a more challenging task. Typically, the data available were confined to roads officially designated as “class 1” and “class 2” roads. We therefore had to extrapolate the data for most départements. To do so, we used an empirical plot benchmarked to the thirty or so départements for which the traffic data were exhaustive.

Lastly, on the principle that “other roadways” provide the same interconnection function as local roads, we posited that mileage traveled on “other roadways” was proportional to mileage traveled on local roads. Dividing the number of deaths observed locally in both categories by the national total for both categories, we obtained a proportionality coefficient of 0.087.

IALs, 1998-2002

The département IALs for 1998-2002 are shown on p. 65, from the highest to the lowest. As these overall results are not broken down by road category, we can, of course, draw only some very general conclusions. It will be noted, for example, that mountainous départements and, even more so, highly urbanized départements typically exhibit a low IAL. This is due to driving speeds, which are slower in mountainous and urban areas. Conversely, the départements situated in the plains, which experience heavy truck traffic, usually display a high IAL.

To return to the methodological aspects, the range of IAL values is narrow, from 0.6 for the Val-d’Oise to 1.50 for the Eure-et-Loir, which translates into a 1:2.5 ratio between the minimum and maximum values. The ratio of the number of deaths to the local population—an indicator whose limitations we criticized at the beginning of our

Empirical plot used to estimate traffic on local (département) roads
A new indicator for local accident statistics

The main contribution of the new local accident indicator consists in this more refined approach to variability between départements.

The IAL’s contribution

The explanation for IAL variations does not lie, of course, in traffic volume or traffic distribution by road category, since these are precisely the variability factors that the computation method takes into account.

What IAL variations reveal is the impact of the other factors behind inter-département variability. The most important are: road infrastructure (signs, surfacing, dangerous bends, trees, etc.), driver behavior (drinking, speed, use of seatbelt or helmet, etc.), the share of fatal accidents caused by trucks, the share of motorcyclists in the number of fatalities, etc. On almost all of these factors, it is possible to take short-term action—or even action with near-instant effects—whereas only long-term action is possible to influence traffic volume and traffic distribution by road category.4

Hence the IAL’s present and future value in guiding and evaluating local road-safety policies. In this area, however, almost all the issues at stake are local (setting aside the

4. For example, by building new highway sections or implementing an aggressive policy to promote public transportation.

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**Département IALs, 1998-2002**

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Numbers on the map are the département codes (see table above)
vehicle improvements decided at the international level in Geneva, and national communication campaigns). An initial challenge, therefore, will be to promote the practical use of the indicator, especially in all the départements where the result is “compelling.” The early focus will be on the ten worst-ranked départements, concentrating the analysis on what can be done in terms of checks, improvements in the main-road network, and actions targeted at local government.

Consolidating the IAL

The new local accident indicators were the fruit of initial reflections concerning the development of a ranking of towns, cities, and départements.

As the work advanced, it became clear that (1) given the state of our knowledge at the time, we could not claim to build an indicator sufficiently reliable to serve as a basis for inter-city comparisons, and (2) fundamental research was needed on the main determinants of accidents in urban areas.5

At the same time, for the départements, we found that while the results were more relevant, the very term of ranking was inappropriate. Not that we had doubts on the method, but we are well aware that our new indicators are not beyond reproach in their present state. The first reason is the previously mentioned difficulty of measuring urban accidents. The second reason is the persistent lack of full information about traffic volume on local roads—which heavily influences the total result for a département. Much remains to be done, therefore, to consolidate the IAL, including the transformation of the computation method into a sliding model in order to annualize IAL production at minimal expense (1998-2002 series, etc.).

Yet, even with its imperfections, our new local accident indicator has already proved its usefulness, which consists in allowing comparisons and parallels between different situations in order to stimulate reflections that will lead to research on specific topics. That is the real reason for discarding the term ranking. Road safety is far too complex a phenomenon to allow an easy analysis and modeling of its parameters. We must proceed modestly, by collecting relevant data and engaging in what our English-speaking colleagues call benchmarking.

5. This study was conducted by the Center for Studies on Networks, Transportation, Urban Planning, and Public Construction (Centre d’Études sur les Réseaux, les Transports, l’Urbanisme et les Constructions Publiques: CERTU).